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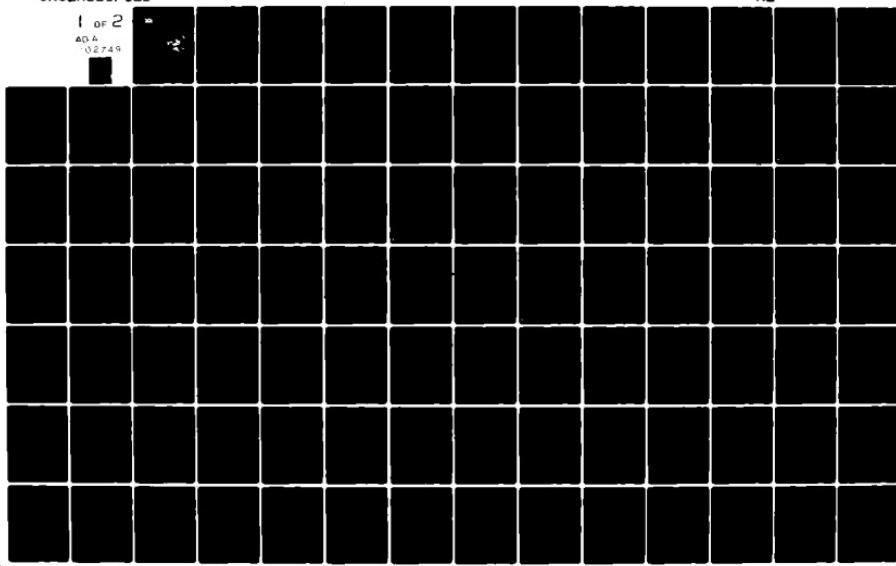
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REPROGRAPHICS CAREER LADDER AFSC 703X0.(U)

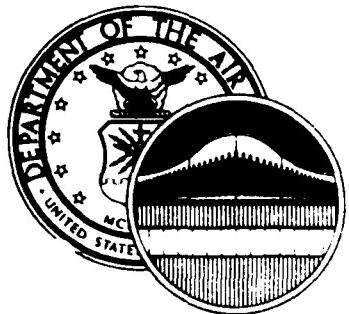
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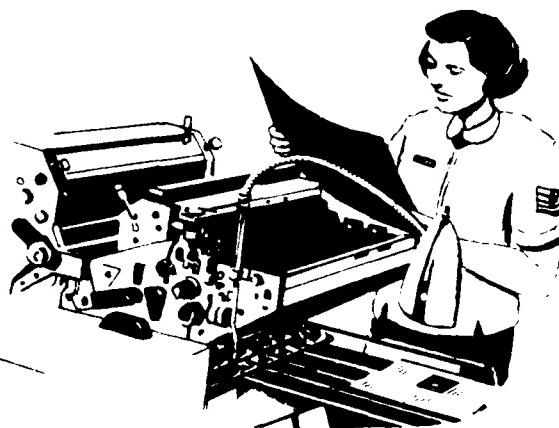




UNITED STATES AIR FORCE

ADA 102749

OCCUPATIONAL SURVEY REPORT



REPROGRAPHICS CAREER LADDER
AFSC 703X0

AFPT 90-703-444

JULY 1981



OCCUPATIONAL ANALYSIS PROGRAM
USAF OCCUPATIONAL MEASUREMENT CENTER
AIR TRAINING COMMAND
RANDOLPH AFB, TEXAS 78150

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PREFACE

This report presents the results of a recently completed Air Force Occupational Survey of the Reprographics career ladder (AFSCs 70330, 70350, 70370, and 70390). Authorization for this occupational survey is contained in AFR 35-2. Computer printouts used in producing this report are available for use by operating and training officials.

The Air Force occupational analysis program has been in existence since 1956 when initial research was undertaken by the Air Force Human Resources Laboratory (AFHRL) to develop a methodology for gathering and analyzing occupational information. In 1967, an operational occupational analysis program was established within the Air Training Command and surveys were produced annually for 12 enlisted specialties. In 1972, the program was expanded to conduct occupational surveys covering 51 career fields annually. In late 1976, the program was again expanded to include the survey of officer utilization fields, to permit special management applications projects, and to support interservice or joint service occupational analyses.

The survey instrument used in the present project was developed by Second Lieutenant Kevin F. Morefield, Inventory Development Specialist. Second Lieutenant Carlton F. Middleton analyzed the survey data and wrote the final report. This report has been reviewed and approved by Lieutenant Colonel Jimmy L. Mitchell, Chief, Airman Career Ladders Analysis Section, Occupational Analysis Branch, USAF Occupational Measurement Center, Randolph AFB, Texas 78150.

Copies of this report are available to air staff sections, major commands and other interested training and management personnel upon request to the USAF Occupational Measurement Center, attention to the Chief, Occupational Analysis Branch (OMY), Randolph AFB, Texas 78150.

This report has been reviewed and is approved.

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SUMMARY OF RESULTS

1. Survey Coverage. Inventory booklets were administered to Reprographics incumbents in late 1980. Responses were received from 509 703X0 personnel (86 percent of the eligible population). The overall sample was representative and provided a comprehensive picture of the 703X0 population.
2. Career Ladder Structure. Respondents performed a number of different jobs centering around printing, duplicating, binding, photolithography, and micrographics, or a combination of these functions. Other jobs included supervisors and production control personnel. The greatest functional overlap was found in the performance of offset duplicator, bindery, and printing press tasks. Offset duplicators are the major concentration of the career ladder. The location of the incumbent seems to be a determining factor in the job performed, with some individuals assigned to bases having both offset duplicators and printing presses reporting the performance of tasks in both areas. Photolithography and micrographics were not performed to a great extent in the field. Individuals who performed these jobs tended to specialize in the area. However, it is realistic to expect that the micrographics job will be increasingly integrated into the overall Reprographics job as more incumbents are trained in micrographics and spread throughout the field.
3. Career Ladder Progression. Three- and 5-skill level incumbents perform a primarily technical job with the 7-skill level personnel transitioning to the totally supervisory 9-skill level job by performing a combination of technical and supervisory duties. Similar trends from a more technical to a more supervisory job were noted for TAFMS groups as well.
4. Analysis of CONUS versus Overseas Groups. Only minor differences were found in the regraphics job for the CONUS as compared to the overseas respondents.
5. Major Command Comparison. Overall, there were only minor differences noted between the major commands in terms of tasks and duties. The largest difference concerned Air Force Systems Command (AFSC) personnel, who spent the greatest amount of time of any major command performing micrographics functions and the smallest amount of time performing electrostatic master functions.
6. Analysis of Specialty Training. Analysis of the Specialty Training Standard (STS) in light of survey data revealed a comprehensive document adequately covering the many regraphics functions and equipment.
7. Analysis of AFR 39-1. The AFR 39-1 specialty descriptions were compared to occupational survey data for each of the skill levels. Most descriptions were generally accurate; however, the specialty description for AFSC 70370 emphasized the technical aspect of their job more than the supervisory aspect. According to survey results, the emphasis should be placed slightly more on the supervisory aspect of the job, since the technical nature of the job comprised less than 40 percent of the total job time. Thus, some refinement of this document may be appropriate.

8. Reprographics Course Graduates. Survey respondents who reported having completed the Reprographics course at Ft. Belvoir, VA., were examined closely in terms of tasks performed as well as for background and job satisfaction indices. Overall, the graduates performed diverse jobs indicating dispersion throughout all career ladder jobs. The most common functional areas reported by graduates were printing and duplicating. Job satisfaction was high but reenlistment intentions were low.

9. Implications. The merger of the 713X0, 713X1, and 713X2 career ladders into a single 703X0 Reprographics career ladder has resulted in a heterogeneous Reprographics career ladder with a major concentration in the area of operation and maintenance of offset duplicators. Some jobs still tend to differentiate on the basis of the previously specialized reprographics functions; however, job groups were also identified which perform a combination of some of these functions. One of the major determining factors of the job performed was found to be the base where the personnel were located. Respondents indicate that if they are located at a base having printing presses, many times they are required to perform both offset duplicator and printing press tasks. Overall job satisfaction is high among career ladder incumbents.

OCCUPATIONAL SURVEY REPORT
REPROGRAPHICS CAREER LADDER
(AFSC 703X0)

INTRODUCTION

This is a report of an occupational survey of the Reprographics career ladder (AFSC 703X0) completed by the Occupational Analysis Branch, USAF Occupational Measurement Center, in June 1981. The 703X0 career field was created in October 1979 when the Printing-Binding (713X0), Photolithography (713X1), and Duplicating (713X2) career ladders were merged together into a single ladder. Along with the combination of these separate jobs, micrographics work was also included.

Typical functions performed by Reprographics personnel include operating presses and bindery equipment, preparing line and halftone negatives and positives, working with offset duplicators, performing operator maintenance, and operating computer output microform equipment. Entry into the field is either by directed-duty assignment (DDA), cross-training, or through a category B basic technical training course (ESABD70330) at Ft. Belvoir, VA. This interservice course lasts 15 weeks and two days, with entry into the course being controlled and limited to only a portion of the incoming 703X0 personnel.

Objectives

The current project was designed to analyze the nature of the job 703X0 personnel perform and the degree of integration of the three previous AFSCs. Topics discussed in this report include: (1) survey methodology, (2) jobs performed by career ladder incumbents, (3) comparison of job structure to career ladder documents, such as AFR 39-1 Specialty Descriptions and the Specialty Training Standard, (4) jobs and tasks performed across skill level groups, (5) comparison of the current with the previous survey, and (6) implications of this report.

SURVEY METHODOLOGY

Inventory Development

Data collection for this Occupational Survey Report was accomplished using USAF Job Inventory AFPT 90-703-444. Development of this inventory began with a thorough review of the previous 1974 job inventory AFPT 90-711-713-158. Pertinent career ladder publications and directives were then reviewed for additional input. From this investigation, a new tentative task list was developed. The tentative inventory was then taken into the field for validation by subject matter specialists working in operational units. From this review process, a final inventory was developed consisting of 484 tasks grouped under 14 duty headings. An extensive background section with questions regarding work location, functional area of work, equipment worked with, and job satisfaction was combined with the task inventory.

Survey Administration

During the period from September 1980 to January 1981, local consolidated base personnel offices (CBPOs) administered job inventories to all DAFSC 70330, 70350, 70370, and 70390 personnel at operational units both in the Continental United States (CONUS) and overseas. Personnel were selected from Uniform Airman Record (UAR) data tapes generated by the Air Force Manpower and Personnel Center (AFMPC) and maintained by the Air Force Human Resources Laboratory (AFHRL).

The 703X0 job inventory consisted of two sections: (1) a background section which included questions concerning areas such as equipment and job satisfaction, and (2) a task section with a comprehensive listing of the tasks performed by career ladder personnel. Incumbents first checked the tasks they performed and then rated each task on a nine-point scale showing time spent on that task as compared to all other tasks checked. The rating scale ranged from one (very small amount of time spent) to nine (very large amount of time spent), with a rating of five representing an average amount of time spent performing a task.

To determine the relative amount of time an incumbent spends on each task, all of the incumbent's ratings are assumed to account for 100 percent of his or her time spent on the job. The ratings are then summed and each task rating is then divided by the total number of task responses and the quotient is multiplied by 100. This procedure provides a basis for comparing tasks not only in terms of percent members performing, but also in terms of average percent time spent.

Data Processing and Analysis

Once job inventories are returned from the field, they are prepared so that task responses and background information can be optically scanned. Other biographical information (such as name, base, AUTOVON extension) are keypunched onto disks and entered directly into the computer. Once both sets of data are entered into the computer, the task, background, and biographical information are merged to form a complete case record for each respondent. Computer generated programs using Comprehensive Occupational Data Analysis Programs (CODAP) techniques are then applied to the data.

CODAP produces job descriptions for respondents based on their responses to specific inventory tasks. Computer generated job descriptions are available for DAFSC, TAFMS, and MAJCOM groups, and include such information as percent members performing each task, the average percent time spent performing each task, the percent members utilizing various pieces of equipment, and the cumulative average percent time spent by all members for each task in the inventory.

A key aspect of the USAF Occupational Analysis Program is to examine the structure of career ladders in terms of what people are actually doing in the field, rather than how official career ladder documents say they are organized. This is accomplished by performing a cluster analysis on the task responses of the 703X0 respondents. Those incumbents who perform similar tasks and who spend similar amounts of time on those tasks will normally group together.

Survey Sample

One hundred percent of the 703X0 population were solicited to participate in this survey. This insures a representative sample across all segments of the career ladder. Table 1 reflects the major command distribution of personnel assigned to the 703X0 career field as of October 1980. Table 2 reflects the percentage distribution by paygrade. The distribution of the survey sample in terms of TAFMS is displayed in Table 3. Overall, useable returned inventories were received from 509 of the 646 total assigned or 79 percent of the total population.

Task Factor Administration

In addition to completing a job inventory booklet, senior 70370 personnel were also asked to complete a second booklet for either task difficulty or training emphasis. The task difficulty and training emphasis booklets were processed separately from the job inventories. The task difficulty ratings were then used in a number of different analyses discussed in more detail within the report.

Task Difficulty. Each senior NCO completing a task difficulty booklet was asked to rate all of the tasks on a nine-point scale from extremely low to extremely high difficulty, with difficulty defined as the length of time it takes an average incumbent to learn to do the task. Ratings were then adjusted so that tasks of average difficulty reflect a rating of 5.00.

Task difficulty data were independently collected from 36 experienced 7-skill level personnel assigned to a number of different major commands. The interrater reliability (as assessed through components of variance of standard group means) of .93 for these 703X0 raters reflected high agreement and was considered useable by normal reliability criterion. The resulting data were a rank ordering of tasks indicating a relative degree of difficulty for each task in the inventory.

Job Difficulty Index (JDI). After computing a task difficulty value for each task item, it was then possible to compute a Job Difficulty Index (JDI) for the groups identified in the job structure analysis. This index provided a relative measure of which jobs, when compared to other jobs identified, were more or less difficult. An equation using the number of tasks performed and the average difficulty per unit time spent (ADPUTS) as variables was the basis for the JDI. The index ranges from one for very easy jobs to 25 for very difficult jobs. The indices were adjusted so that the average job difficulty index was 13.00. Thus, the more time a group spends on difficult tasks and the more tasks they perform, the higher their job difficulty index.

Training Emphasis. Individuals completing training emphasis booklets were asked to rate all of the tasks on a ten-point scale from no training required to extremely heavy training required. Training emphasis yields a rating of tasks indicating where the emphasis should be placed on structured training for first-term personnel. Structured training was defined as training provided at resident technical schools, Field Training Detachments (FTD), Mobile Training Teams (MTT), formal OJT, or by any other organized training method.

Training emphasis data were independently collected from 42 experienced 7- or 9-skill level personnel stationed worldwide (see Table 5). The interrater reliability (as assessed through components of variance of standard group means) for these raters was .94, indicating a good agreement among raters as to which tasks required some form of structured training and which did not. In this specialty, tasks rated highest in training emphasis show ratings of 4.74 or above (one standard deviation above the mean); the average training emphasis rating was 3.02; and those tasks with ratings less than 1.30 were considered as requiring very little emphasis in training.

When used in conjunction with other factors, such as percent members performing, the task difficulty and training emphasis ratings provide insight into training. The information these ratings provide can help improve both training and career ladder management.

TABLE 1
COMMAND REPRESENTATION OF SURVEY SAMPLE

<u>COMMAND</u>	<u>PERCENT OF ASSIGNED</u>	<u>PERCENT OF SAMPLE</u>
SAC	25	27
TAC	15	15
USAFE	13	12
ATC	12	13
MAC	11	13
PACAF	5	5
AFSC	4	4
OTHER	15	11
TOTAL	100	100
TOTAL ASSIGNED*:	646	
TOTAL ELIGIBLE FOR SURVEY**:	589	
TOTAL USEABLE RETURNS:	509	
RETURN RATE:	86%	

* AUTHORIZED STRENGTH AS OF OCTOBER 1980
** EXCLUDES THOSE IN PCS STATUS, STUDENTS, HOSPITALIZED PERSONNEL,
AND PERSONNEL WITH LESS THAN SIX WEEKS ON THE JOB

TABLE 2
PAYGRADE DISTRIBUTION OF SURVEY SAMPLE

<u>PAYGRADE</u>	<u>PERCENT OF ASSIGNED</u>	<u>PERCENT OF SAMPLE</u>
AMN	22	18
E-4	25	24
E-5	25	29
E-6	17	19
E-7	9	8
E-8	2	2
E-9	0	0
TOTAL	100	100

TABLE 3
TAFMS DISTRIBUTION OF SURVEY SAMPLE

	MONTHS TAFMS					
	<u>1-48</u>	<u>49-96</u>	<u>97-144</u>	<u>145-192</u>	<u>193-240</u>	<u>241+</u>
NUMBER IN SAMPLE	169	87	88	65	67	33
PERCENT OF SAMPLE	33%	17%	17%	13%	13%	7%

TABLE 4
COMMAND REPRESENTATION OF TASK DIFFICULTY RATERS

<u>COMMAND</u>	<u>PERCENT OF ASSIGNED</u>	<u>PERCENT OF SAMPLE</u>
SAC	25	22
TAC	15	8
USAFE	13	11
ATC	12	14
MAC	11	11
PACAF	5	6
AFSC	4	3
OTHER	<u>15</u>	<u>25</u>
	100	100

TABLE 5
COMMAND REPRESENTATION OF TRAINING EMPHASIS RATERS

<u>COMMAND</u>	<u>PERCENT OF ASSIGNED</u>	<u>PERCENT OF SAMPLE</u>
SAC	25	29
TAC	15	7
USAFE	13	12
ATC	12	17
MAC	11	7
PACAF	5	5
AFSC	4	5
OTHER	<u>15</u>	<u>18</u>
	100	100

CAREER LADDER STRUCTURE

One of the most important aspects of the USAF occupational Analysis Program is the career ladder structure analysis. This analysis examines the diversity of the jobs being performed by career ladder incumbents on the basis of the similarity of tasks performed and the percent time spent on tasks, independent of classification, grade, rank, or other background information. In this case, the career ladder structure analysis will also provide an indication of how the previous 713X0, 713X1, and 713X2 AFSCs have merged to form the present 703X0 Repographics career ladder.

The Comprehensive Occupational Data Analysis Program (CODAP) provides a hierarchical grouping in which each individual job description in the sample is compared to every other job description in terms of tasks performed and the relative amount of time spent on each task in the job inventory. The automated system locates the two job descriptions with the most similar tasks and percent time ratings and combines them to form a composite job description. Then, in successive stages, new members are added to initial groups, or new groups are formed based on their task and time rating similarities. This procedure continues until all members of the sample have been included and combined into a single composite group. The end-product of this procedure is a computer printout displaying each group as it relates to all other groups. This display is then analyzed using a variety of supporting computer products. This analysis serves to identify: (1) the number and characteristics of the different jobs which exist within the career ladder, (2) the tasks which tend to be performed together by the same respondents, and (3) the breadth of the jobs which exist within the career ladder.

The basic identifying group used in the hierarchical job structuring process is the job type. A job type is a group of individuals who perform many of the same tasks and spend similar amounts of time performing them. When there is a substantial degree of similarity between different job types, they are grouped together and labeled as clusters. In many career fields, there are specialized job types that are too dissimilar to be grouped into any cluster. These unique groups are labeled independent job types.

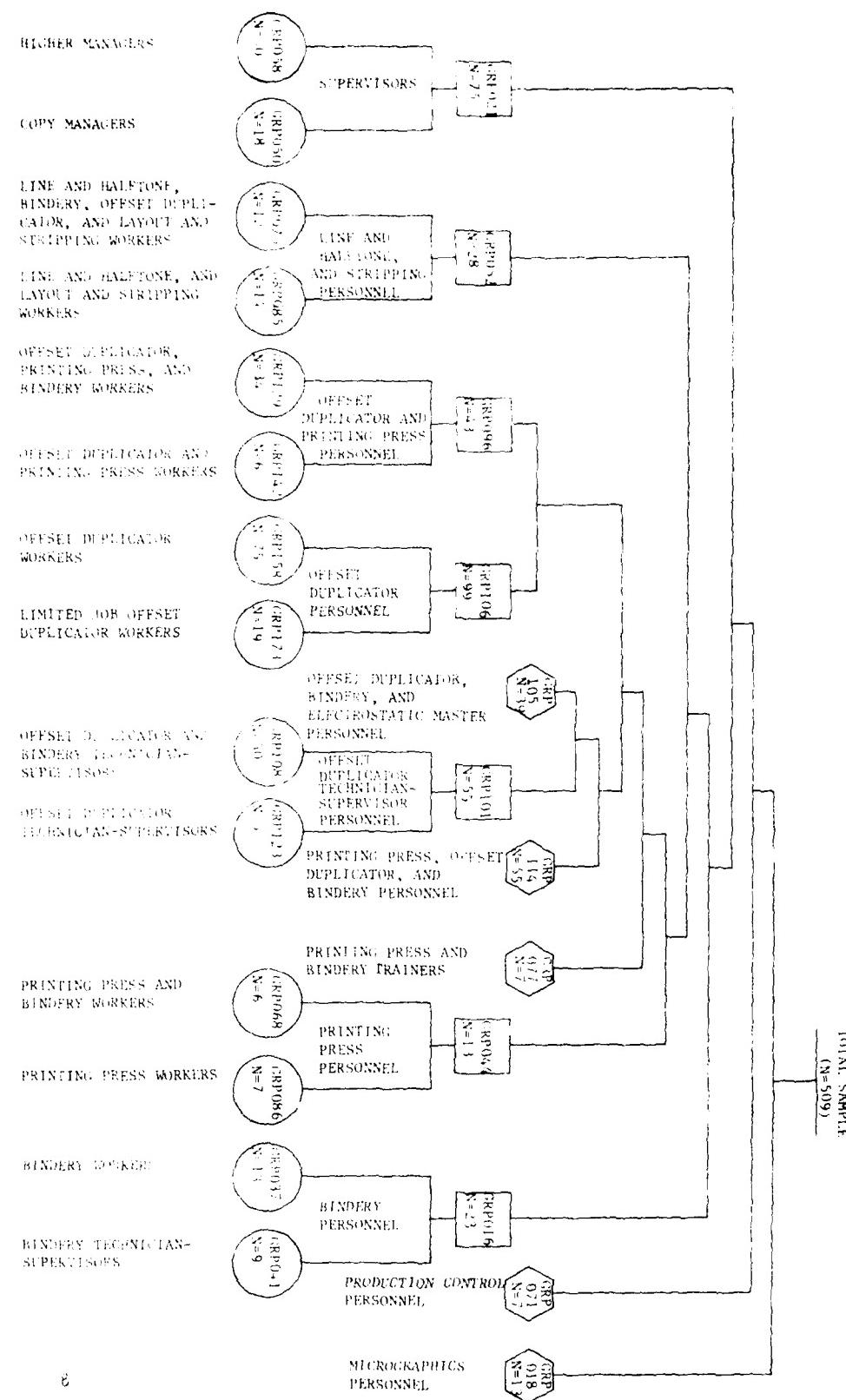
Based on task similarity, the division of actual jobs performed in the 703X0 career ladder is illustrated in Figure 1. The seven clusters and five independent job types are listed below. (The GRP number shown beside each title is a reference to computer printed information included for use by classification and training officials.)

I. SUPERVISORS (GRP021, N=75)

- a. Higher Managers (GRP058, N=50)
- b. Copy Managers (GRP050, N=18)

II. LINE AND HALFTONE, AND LAYOUT AND STRIPPING PERSONNEL (GRP052, N=28)

- a. Line and Halftone, Bindery, Offset Duplicator, and Layout and Stripping Workers (GRP075, N=12)
- b. Line and Halftone, and Layout and Stripping Workers (GRP085, N=14)



- III. OFFSET DUPLICATOR (OD) AND PRINTING PRESS (PP) PERSONNEL (GRP096, N=43)
 - a. Offset Duplicator, Printing Press, and Bindery Workers (GRP129, N=34)
 - b. Offset Duplicator and Printing Press Workers (GRP142, N=6)
- IV. OFFSET DUPLICATOR PERSONNEL (GRP106, N=99)
 - a. Offset Duplicator Workers (GRP158, N=75)
 - b. Limited Job Offset Duplicator Workers (GRP173, N=19)
- V. OFFSET DUPLICATOR, BINDERY, AND ELECTROSTATIC MASTER PERSONNEL (GRP105, N=39)
- VI. OFFSET DUPLICATOR TECHNICIAN-SUPERVISOR PERSONNEL (GRP101, N=55)
 - a. Offset Duplicator and Bindery Technician-Supervisors (GRP108, N=50)
 - b. Offset Duplicator Technician-Supervisors (GRP123, N=5)
- VII. PRINTING PRESS, OFFSET DUPLICATOR, AND BINDERY PERSONNEL (GRP114, N=55)
- VIII. PRINTING PRESS AND BINDERY TRAINERS (GRP077, N=7)
- IX. PRINTING PRESS PERSONNEL (GRP044, N=13)
 - a. Printing Press and Bindery Workers (GRP068, N=6)
 - b. Printing Press Workers (GRP086, N=7)
- X. BINDERY PERSONNEL (GRP016, N=23)
 - a. Bindery Workers (GRP037, N=13)
 - b. Bindery Technician-Supervisors (GRP041, N=9)
- XI. PRODUCTION CONTROL PERSONNEL (GRP071, N=7)
- XII. MICROGRAPHICS PERSONNEL (GRP018, N=13)

Overview

Analysis of the 703X0 career ladder structure revealed that while some specialized groups did emerge, some groups also performed a number of the major Reprographics functions to varying degrees. For example, the Offset Duplicator and Printing Press Personnel cluster and the Printing Press, Offset Duplicator, and Bindery Personnel independent job type reflect how the Reprographics functions have been fused in certain groups. On the other hand, the Offset Duplicator Personnel, Printing Press Personnel, and Bindery Personnel clusters, along with the Line and Halftone, and Layout and Stripping Personnel cluster, reflect continuing areas of specialization in the career ladder.

The clusters and independent job types described comprise 90 percent of the total sample (457 members out of a 509-member sample). The remaining ten percent of the sample was comprised of individuals who reported performing a job too dissimilar to be grouped with any of the identified groups. These incumbents were scattered across the cluster-merger diagram. Computer calculations of job similarity indicated that, on the basis of the tasks that these personnel reported performing, they could not be included in any of the already identified groups nor could they be grouped together as a separate group of their own. No specific reasons could be determined as to why these individuals performed such divergent tasks.

Job Group Descriptions

Each of the seven clusters and five independent job types are discussed briefly below. Representative duties and tasks performed and equipment utilized by members in each individual group are displayed in Appendix A. The amount of time spent in duty areas is provided for comparative purposes in Table 6 for clusters and Table 7 for independent job types. General background data is available in Table 8 for clusters and Table 9 for independent job types. Tables 10 and 11 have job satisfaction and related data for clusters and independent job types. Table 12 displays the percentage of members of each group who held previous 713X0 Printing-Binding, 713X1 Photolithography, and 713X2 Duplicating AFSCs. The percentage of group members reporting work in certain major functional areas is displayed in Table 13.

Job type descriptions and representative tasks for job types within clusters are discussed in Appendix B.

I. SUPERVISORS (GRP021). This cluster of 75 respondents reported higher supervisory and managerial duties as their main job concern. As Table 6 displays, 81 percent of the job time of these incumbents is spent in supervisory areas, with only seven percent of their job time spent in technical areas. Administrative responsibilities are also a substantial part of this job, with 12 percent of their job time spent in this area. These respondents reported performing an average of 78 tasks. Some of the typical tasks included:

- determine work priorities
- establish policies and operating procedures
- review printing requests
- determine most economical methods of reproduction
- develop work methods or procedures
- prepare APRs
- establish performance standards for subordinates

Respondents in this cluster had the most time in service of any group, with average total active federal military service (TAFMS) of 193 months (see Table 8). Seventy-two percent of this group reported supervising other personnel, with 67 percent of the group having a 7-skill level. Forty percent of the group indicated working at a group level of organization in their present job. Two major work titles, that of Copier Manager and NCOIC, Duplicating Center, were reported by this group. Another point of interest

is the fact that 43 percent of the members reported a previous 713X0 Printing-Binding AFSC. The only equipment used to a substantial degree by these incumbents were electrostatic copiers and platemakers. Overall, then, the Supervisors cluster is one of the most senior groups in the career ladder structure, with job emphasis concentrated in the areas of higher management.

As Table 10 reveals, job satisfaction data for this group were high. Reenlistment intentions were not as high, with 68 percent reporting such intentions; however, this is understandable considering that 21 percent of these incumbents intend to retire.

II. LINE AND HALFTONE, AND LAYOUT AND STRIPPING PERSONNEL (GRP052). The 28 respondents in this cluster performed a job centering around the reproduction of images. Sixty-eight percent of these personnel reported photolithography as their main functional area of work. Many of the major tasks performed by these incumbents are related to cameras, negatives/positives, copyboards, lensboards, and related equipment. Thirty-nine percent of their job time is spent preparing line or halftone negatives and positives, while an additional 19 percent of their job time focuses on layout and stripping functions (see Table 6). On the average, these incumbents performed 103 tasks. Some of the typical tasks are:

- set camera exposure times
- adjust camera lights
- adjust copyboards
- adjust lensboard
- flash film for shadow dots
- assemble flats
- inspect negatives
- position and tape negatives on layout sheets

Thirty-six percent of these respondents reported a previous 713X0 Printing-Binding AFSC and 32 percent reported a 713X1 Photolithography AFSC. Thirty-nine percent of this group were from the Strategic Air Command (SAC) and another 25 percent were from the Tactical Air Command (TAC). Squadron and plant levels of organization were each reported by 29 percent of this cluster. Camera operator, platemaker, and stripper were the main work titles indicated by these individuals. Extensive use of equipment was also reported, (see Appendix A). In general, this cluster of respondents reported a mostly technical job dealing with line and halftone, and layout and stripping functions. Seventy-one percent of these respondents indicated that they rotate among the various organizational functions.

Job satisfaction data revealed a fairly satisfied group with 68 percent of the members describing their job as interesting. High percentages of these members also felt their talents and training were well utilized. However, only 57 percent of these incumbents report intentions to reenlist with 36 percent planning not to reenlist.

III. OFFSET DUPLICATOR AND PRINTING PRESS PERSONNEL (GRP096). Operating offset duplicators (OD) and printing presses (PP) best describes the job of the 43 individuals making up this cluster. Operating and maintaining offset duplicators absorbs 36 percent of their time, while performing printing press functions takes an additional 33 percent of their job time. Sixty-one percent of these incumbents report "printing" as the main

functional area of their job and 37 percent report "duplicating" as the main functional area (see Table 13). Individuals in this cluster performed an average of 80 tasks. Some of the common tasks performed include:

- mount OD masters on master cylinders
- adjust OD ink flow
- mix OD fountain solutions
- moisten duplicating dampening rollers
- clean PP impression cylinders
- adjust PP vacuum or airflow
- clean PP exteriors

First enlistment personnel accounted for 51 percent of this cluster and 19 percent of the group reported graduating from the Reprographics course at Ft. Belvoir. This is the largest concentration of course graduates of any job group. Thirty-five percent of the group reported operating at a group level of organization. Some of the common work titles of personnel in this cluster were duplicator operator, platemaker, and press operator. Some of the common equipment used includes binding machines, electric staplers, electrostatic copier/platemakers, and single-head drills (see Appendix A). Fifty-six percent of the group reported rotating among the various organizational functions.

As depicted in Table 10, job satisfaction indices for this group were about average. Sixty-five percent of the respondents found their job interesting, higher percentages felt their talents and training were well utilized, but only 54 percent planned to reenlist, with 40 percent intending not to reenlist. Overall then, the group finds the job fairly satisfying; however, many members do not want to continue in the Air Force.

IV. OFFSET DUPLICATOR PERSONNEL (GRP106). The 99 members of this group, comprising 19 percent of the total sample, formed the largest of any of the job groups. Operating and maintaining offset duplicators is the major emphasis of this group, with 65 percent of their job time spent in this area. Fifty-nine percent of the group also reported duplicating as their major functional area. This group performed an average of only 50 tasks. Some of these common tasks were:

- adjust OD ink flow
- adjust image on ODs
- set OD counters
- replenish OD ink fountains
- run masters through master converters
- mount OD masters on master cylinders

First enlistment personnel accounted for 60 percent of the Offset Duplicator Personnel cluster. As could be expected, average time in service (TAFMS) for the group was also low at 60 months, with the average time in the career field being even lower at 42 months. Twenty-seven percent of the respondents in this group were female and 23 percent of the cluster were located overseas. Some of the work titles commonly used by these incumbents were duplicator operator and press operator. Equipment used in the job performed by Offset Duplicator Personnel include electrostatic copiers/platemakers and paper cutters. Forty-one percent of the individuals in this group report working at a group level of organization.

Job satisfaction was relatively low for this group, with only 55 percent of the members finding their job interesting. A greater number of these incumbents felt their talents and training were well utilized, but only 51 percent plan to reenlist, with 45 percent planning to separate. Overall, the Offset Duplicator Personnel were one of the least satisfied groups in the career ladder structure.

V. OFFSET DUPLICATOR, BINDERY, AND ELECTROSTATIC MASTER PERSONNEL (GRP105). The 39 members of this independent job type operate offset duplicators, perform bindery functions, and perform electrostatic master (EM) functions. Thirty-three percent of their job time is spent on the duty of operating and maintaining offset duplicators. Table 7 displays the time spent by these individuals on the other duties. Forty-four percent of the cluster members reported duplicating as their main functional area of work, while an additional 18 percent listed binding as their main functional area. These respondents performed an average of 93 tasks. Representative tasks include:

- run masters through master converters
- mount OD masters on master cylinders
- mix OD fountain solutions
- operate collators
- collate paper by hand
- adjust EMI exposure time
- adjust position of images on EMs

Seventy-nine percent of this group reported a 5-skill level DAFSC and 28 percent of the group listed an assignment overseas. The group level of organization was most often reported by these individuals. Bindery worker, duplicator operator, platemaker and press operator were the main work titles of these incumbents. Forty-four percent of this group listed 713X0 Printing-Binding and 44 percent listed 713X2 Duplicating as previous AFSCs. Some of the common equipment used by these members includes binding machines, manual paper cutters, saddle stitchers, and single-head drills. Sixty-nine percent of these individuals indicated rotating among the various organizational functions.

Job satisfaction was not impressive for this group, with only 56 percent of the incumbents finding their job interesting. Paradoxically, however, a high percentage (82 percent) of the members report plans to reenlist. Perceived utilization of training and talents are both also higher than job interest, but lower than reenlistment intentions (see Table 10).

VI. OFFSET DUPLICATOR TECHNICIAN-SUPERVISOR PERSONNEL (GRP101). The 55 respondents in this group operate and maintain offset duplicators and perform first-line supervisory duties. Fifty percent of their job time was reported in supervisory areas, with an additional 17 percent spent on operating and maintaining offset duplicators. Fifty-five percent of these respondents also reported duplicating as their major functional area and 85 percent reported that they supervise other personnel. This group performed an average of 143 tasks. Representative tasks include:

determine work priorities
determine most economical methods of reproduction
review printing requests
maintain logs of jobs processed
adjust EMI exposure time
adjust OD ink flow
adjust image on ODs

Forty-six percent of the group were located overseas, and members had an average grade of E-6. These personnel are the second most senior of all the clusters and independent job types, with an average time in service of 175 months. Forty-two percent of this group reported working at a group level of organization and 27 percent reported a base level of organization. Common work titles for these incumbents were copier manager, duplicator operator, NCOIC duplicating center, reproduction manager, and supply manager. These individuals also had one of the most difficult jobs performed with a job difficulty index of 18.8. These respondents indicated much mobility in their job, with 78 percent reporting that they rotate among organizational functions. As an additional point of interest, 51 percent of these respondents also held a previous 713X2 duplicating AFSC.

Job satisfaction indices were high for this group, with 78 percent describing their job as interesting, 85 percent feeling their talents are well utilized, and 89 percent indicating good utilization of their training. Only 60 percent indicated intentions to reenlist; however, this can be explained due to the 27 percent who plan to retire.

VII. PRINTING PRESS, OFFSET DUPLICATOR, AND BINDERY PERSONNEL (GRPII4). Comprised of 55 members, this independent job type concentrated on the performance of printing press functions and the operation and maintenance of offset duplicators, as well as the performance of bindery functions (see Table 7). As could be expected, printing, duplicating, and binding were the major functional areas for this group. Respondents in this group reported performing an average of 166 tasks. Representative tasks performed by these incumbents include:

staple paper
adjust image on ODs
clean PP impression cylinders
mount PP vacuum or air flow
set PP counters
set OD counters

With a Job Difficulty Index (JDI) of 18.6, these individuals reported one of the harder jobs in the career ladder structure. Fifty-eight percent of this group's members had a previous AFSC of 713X0 Printing-Binding or 713X2 Duplicating. The group level of organization was most widely identified by these incumbents, with 35 percent of the group members also being in SAC. All members of this group were male, 67 percent of whom indicated that they rotated among the various organizational functions. Bindery worker, camera operator, duplicator operator, platemaker, and press operator were the main work titles of these respondents. Equipment used by these individuals include binding machines, electric staplers, platemaking cameras, and saddle stitchers.

VIII. PRINTING PRESS AND BINDERY TRAINERS (GRP077). The seven individuals in this group account for only one percent of the total sample. Training and performing bindery and printing press functions is the main job of these personnel. Table 7 provides a listing of the time spent by these incumbents in the different duty areas. These individuals reported the broadest job in the career ladder, with an average number of tasks performed of 329. These incumbents formed a very homogeneous group, with a large core of tasks performed by a high percentage of group members. Some of these common tasks include:

- supervise Reprographic Technicians
- write job proficiency guides
- maintain study reference files
- establish unit training standards
- pack printed materials manually
- remove or replace OD multisheet detectors
- adjust PP ink rollers

Table A8 provides a further listing of tasks along with a listing of representative duties.

Thirty-one percent of this group are female. Fifty-seven percent of the group are in SAC, with an additional 29 percent in USAFE. Eighty-six percent reported supervising others. The average time in service for the group was the third highest, with an average TAFMS of 135 months. No Reprographics course graduates were respondents in this group. This independent job type had the most rotation among organizational functions of any group, with 86 percent of the incumbents reporting that they do rotate. The squadron was the most common level of organization reported by these members. Common work titles were bindery worker, camera operator, copier manager, duplicator operator, NCOIC duplicating center, platemaker, press operator, and supply manager. Common equipment used on the job includes collating cabinets, electrostatic copiers/platemakers, and punching machines. These individuals have the hardest job reported in the career field with a JDI of 21.0.

Only 43 percent of the incumbents in this group found their job interesting, but most felt their talents were well utilized, and 57 percent planned to reenlist.

IX. PRINTING PRESS PERSONNEL (GRP044). This cluster consists of 13 members who almost exclusively perform printing press functions. Sixty percent of their job time is spent in this area. An additional 16 percent of their job time is also spent performing bindery functions. Eighty-four percent of this group also listed "printing" as the major functional area of their work. This cluster had an average number of tasks performed of 67. Common tasks include:

- clean PP exteriors
- adjust PP vacuum or airflow
- load PP feeder systems
- adjust PP pile height indicators
- adjust PP impression cylinder pressure
- adjust PP water rollers

Sixty-two percent of the members of this cluster were in their first enlistment and 31 percent of the cluster were females. The average time in service for the group was 73 months. However, 85 percent of the sample reported a 5-skill level. Fifteen percent of these individuals report having completed the Reprographics course at Ft. Belvoir. No members of this cluster were in PACAF or AFSC; however, 31 percent were in TAC. Individuals indicated working mainly at the major command, base, and group levels of organization. The major work title described by these individuals was that of press operator. Common equipment used by members include electric staplers, manual paper cutters, and electrostatic copiers/platemakers. Only 46 percent of this cluster's members reported rotation among organizational functions.

Printing press personnel reported a fairly interesting job, with only 31 percent finding it not so. Perceived utilization of talents was slightly higher at 77 percent and perceived utilization of training was the same at 69 percent. However, only 39 percent of the members of this group plan to reenlist, with another 39 percent planning not to reenlist and 23 percent planning to retire.

X. BINDERY PERSONNEL (GRP016). Accounting for five percent of the total sample, the 23 members of this group concentrated on the performance of bindery functions. Seventy-six percent of their job time was spent in this area, and 75 percent of the individuals reported binding as their main functional area of work. These individuals reported a very specialized job in the binding area, averaging the performance of only 30 tasks. Representative tasks include:

- operate drills
- operate cutters
- inspect sequencing of pages
- operate stitchers
- collate paper by hand
- operate coilators

Seventeen percent of the respondents in this cluster were graduates of the Reprographics course at Ft. Belvoir, and 26 percent of the cluster members were female. In addition, 35 percent of the incumbents indicated a previous AFSC of 713X0 Printing-Binding. Twenty-six percent of the members were assigned overseas. SAC and ATC had the highest percentages of this cluster at 30 and 26 respectively. The group and base levels of organization had the highest percentages of these personnel. The main work title of the group was that of bindery worker and common equipment used involved those items which were common to bindery functions.

XI. PRODUCTION CONTROL PERSONNEL (GRP071). This group, comprised of seven members, schedules work and controls production in general. These personnel do not perform actual reprographics functions. These individuals performed an average of only nine tasks, most of which were administrative in nature. Overall, on the basis of tasks performed, this is a very heterogeneous group with a very small core of common tasks. Some of the common tasks include:

review printing requests
determine work priorities
maintain logs of jobs processed
collect items to be duplicated or printed

Seventy-one percent of this group held a previous 713X0 Printing-Binding AFSC, with the other 29 percent of the group indicating a previous 713X2 Duplicating AFSC. Twenty-nine percent of these individuals reported a group level of organization and 100 percent reported production controller as a major work title. Fifty-seven percent of these individuals indicated rotation among the functions performed by their organization. Only 14 percent of this group reported supervising other personnel. None of these respondents were graduates from the Reprographics course at Ft. Belvoir.

Job satisfaction indices revealed that 71 percent of this group finds their job interesting, but only 43 percent feel their talents are well utilized. Only 43 percent plan to reenlist, with 29 percent intending not to reenlist (see Table II).

XII. MICROGRAPHICS PERSONNEL (GRP018). The 13 members of this group account for three percent of the total sample. With 79 percent of their job time spent performing micrographics functions, this group is highly specialized. One hundred percent of these incumbents report micrographics as the functional area where the majority of their time is spent (see Table 13). Respondents in this group concentrate on the performance of micrographic tasks including operating micrographics equipment. On the average, these individuals perform 37 tasks. Some of these common tasks include:

operate cameras
thread film into micrographics equipment (ME)
feed originals through ME
perform density step tests
load bulk films into ME
cut fiche

Thirty-one percent of these incumbents are in MAC, 31 percent are in AFSC, and 23 percent are in SAC. Fifty-four percent of this group are female. Indicative of the specialized nature of this group, only 39 percent of these members report rotating among the various organizational functions. None of these individuals report supervising other personnel, with 69 percent of the incumbents in their first enlistment and an average time in service (TAFMS) of only 60 months. In addition, no micrographics personnel reported a DAFSC higher than a 5-skill level. Thirty-one percent of the group reported working at a group level of organization. The major work title reported by these individuals was that of microphotographer. Common equipment used by these incumbents includes automatic film processors, computer output microform devices, and planetary micrographic cameras. Overall, the micrographics personnel are a low experience group with a highly specialized job.

As Table 11 reveals, 77 percent of these personnel find their job interesting and feel their talents are well utilized. However, only 54 percent plan to reenlist, with 46 percent planning not to reenlist.

Summary

There are five major functional areas identified within the 703X0 Reprographics career ladder. These areas are printing, duplicating, photolithography, binding, and micrographics. Most job groups broke out according to concentration in one or more of these areas. However, from reviewing the job groups and the percentage of members in each group from each of the previous AFSSs which merged to form the 703X0, jobs did not break out totally according to previous AFSC. Examination of previous AFSCs of the personnel comprising each job group revealed that the previous AFSC was not a reliable indicator of the job the individual now performs. Rather, the job performed tends to be partially a function of the base where the person is assigned. Although offset duplicators are the main concentration of the career ladder, personnel assigned to bases with printing presses sometimes perform printing press functions. Overall, the 703X0 Reprographics career ladder can be described as a heterogeneous career ladder, with groups differing mainly according to the functional area(s) of their concentration.

TABLE 6
RELATIVE PERCENT TIME SPENT ON DUTIES BY CLUSTERS

DUTIES	LINE & HALFTONE, AND LAYOUT & STRIPPING PERSONNEL (N=75)	OFFSET DUPLICATOR & PRINTING PRESS PERSONNEL (N=28)	OFFSET DUPLICATOR & PRINTING PRESS PERSONNEL (N=43)	OFFSET DUPLICATOR DEPARTMENT SUPERVISOR (N=99)	PRINTING PERSONNEL (N=11)	PRINTING PERSONNEL (N=23)
A ORGANIZING AND PLANNING	19	2	1	1	12	7
B DIRECTING AND IMPLEMENTING	24	3	1	1	16	4
C EVALUATING AND INSPECTING	19	4	1	1	12	4
D TRAINING	8	1	2	2	4	2
E PERFORMING ADMINISTRATIVE AND SUPPLY FUNCTIONS	12	1	1	2	6	2
F PERFORMING COPY MANAGEMENT FUNCTIONS	12	2	2	1	6	2
G PERFORMING ELECTROSTATIC MASTER FUNCTIONS	1	4	4	1	9	2
H OPERATING AND MAINTAINING OFFSET DUPLICATORS	2	1	2	6	17	1
I PERFORMING BINDERY FUNCTIONS	2	8	14	17	16	1
J PERFORMING PRINTING PRESS FUNCTIONS	2	2	2	3	2	1
K PREPARING LINE OR HALFTONE NEGATIVES AND POSITIVES	1	19	1	1	1	1
L PERFORMING LAYOUT AND STRIPPING FUNCTIONS	2	13	7	1	1	1
M PERFORMING PLATEROOM FUNCTIONS	2	1	2	2	2	1
N PERFORMING MICROGRAPHIC FUNCTIONS	1	2	1	1	1	1

* DENOTES LESS THAN ONE PERCENT

TABLE I
ESTIMATED FREQUENCY OF DUTIES BY WORKERS WITH 3-9 YEARS

DUTIES	PRINTING PRESS, COPIER AND MASTER PRINTERS (N=35)		PRINTING PRESS, OFFSET AND MASTER AND FINISH PRINTERS (N=55)		PRINTING PRESS, ANALOGUE AND DIGITAL PRINTERS (N=55)		PRINTING CONTROLS PERSONNEL (N=1)		PRINTING CONTROLS PERSONNEL (N=1)		MICROGRAPHIC PERSONNEL (N=13)	
	PERCENTAGE	NUMBER	PERCENTAGE	NUMBER	PERCENTAGE	NUMBER	PERCENTAGE	NUMBER	PERCENTAGE	NUMBER	PERCENTAGE	NUMBER
A ORGANIZING AND PLANNING	4	1	4	1	6	1	25	2	2	2	2	2
B DIRECTING AND IMPLEMENTING	6	1	5	1	6	1	56	6	6	6	3	3
C EVALUATING AND INSPECTING	4	1	4	1	5	1	41	4	4	4	3	3
D TRAINING	1	1	2	1	1	1	41	4	4	4	4	4
E PERFORMING ADMINISTRATIVE AND SUPPLY FUNCTIONS	5	1	4	1	5	1	47	5	5	5	4	4
F PERFORMING COPY MANAGEMENT FUNCTIONS	7	1	4	1	5	1	45	5	5	5	4	4
G PERFORMING ELECTROSTATIC MASTER FUNCTIONS	45	10	45	10	45	10	45	5	5	5	4	4
H OPERATING AND MAINTAINING OFFSET DUPLICATORS	44	9	44	9	44	9	44	5	5	5	4	4
I PERFORMING BINDERY FUNCTIONS	71	15	71	15	71	15	71	8	8	8	7	7
J PERFORMING PRINTING PRESS FUNCTIONS	2	1	2	1	2	1	2	1	1	1	1	1
K PREPARING LINE OR HALFTONE NEGATIVES AND POSITIVES	1	1	1	1	1	1	1	1	1	1	1	1
L PERFORMING LAYOUT AND STRIPPING FUNCTIONS	4	1	4	1	4	1	4	1	1	1	1	1
M PERFORMING PLATEWORK FUNCTIONS	1	1	1	1	1	1	1	1	1	1	1	1
N PERFORMING MICROGRAPHIC FUNCTIONS	79	17	79	17	79	17	79	8	8	8	7	7

^a DENOTES LESS THAN ONE PERCENT

b

TABLE 8
BACKGROUND INFORMATION FOR CLUSTERS

	SUPERVISORS (GRP021)	LINE AND HALFTONE, AND LAYOUT AND STRIPPING PERSONNEL (GRP052)	OFFSET DUPLICATOR AND PRINTING PRESS PERSONNEL (GRP036)	OFFSET DUPLICATOR TECHNICIAN-SUPERVISOR PERSONNEL (GRP106)	PRINTING PRESS PERSONNEL (GRP044)	BINDERY PERSONNEL (GRP16)
NUMBER IN GROUP	75	28	43	99	11	23
PERCENT OF SAMPLE	15%	6%	8%	19%	3%	5%
PERCENT LOCATED OVERSEAS	25%	4%	16%	23%	15%	26%
DAFSC DISTRIBUTION	-	-	-	-	-	-
70330	14%	37%	22%	7%	14%	14%
70350	23%	50%	58%	73%	85%	61%
70370	67%	52%	5%	5%	8%	7%
70390	10%	4%	-	-	-	-
AVERAGE GRADE	6.2	4.6	3.8	3.4	3.9	3.9
AVERAGE TIME IN CAREER FIELD (MONTHS TICL)	168	88	49	42	45	45
AVERAGE TIME IN SERVICE (MONTHS TAPS)	193	107	63	60	75	75
PERCENT IN FIRST ENLISTMENT	1%	36%	51%	60%	65%	64%
PERCENT SUPERVISING	72%	21%	5%	5%	25%	25%
AVERAGE NUMBER OF TASKS PER DAY	75	103	80	10	67	67
AVERAGE TASK DIFFICULTY PER UNIT OF TIME SPENT (ATDPUTS)	2.5	4.7	4.7	4.7	4.7	4.7
JOB DIFFICULTY INDEX (JDI)	16.0	14.9	11.4	8.8	15.8	15.8
PERCENT COMPLETING REPROGRAPHICS COURSE AT FT. BELVOIR	3%	7%	19%	13%	13%	13%
PERCENT OF FEMALE MEMBERS	4%	21%	23%	23%	41%	41%
PERCENTAGE ROTATING AMONG ORGANIZATIONAL FUNCTIONS	69%	71%	66%	55%	46%	46%

TABLE 9
BACKGROUND INFORMATION FOR INDEPENDENT JOB TYPES

	OFFSET DUPLICATOR, BINDERY, AND ELECTROSTATIC MASTER PERSONNEL (GRP105)	PRINTING PRESS, OFFSET DUPLICATOR, AND BINDERY PERSONNEL (C)P114)	PRINTING PRESS, AND BINDERY TRAINERS (GRP077)	PRODUCTION CONTROL PERSONNEL (GRP071)	MICROGRAPHIC PERSONNEL (GRP018)
NUMBER IN GROUP	39	55	7	7	13
PERCENT LOCATED OVERSEAS	8% 28%	11% 22%	1% 14%	1% 14%	3% 0%
DAFSC DISTRIBUTION	8% 79% 13% -	11% 64% 25% -	14% 43% 43% -	14% 43% 43% -	31% 69% - -
AVERAGE GRADE	4.8	4.7	4.7	4.9	3.9
AVERAGE TIME IN CAREER FIELD (MONTHS TICF)	86	84	113	125	54
AVERAGE TIME IN SERVICE (MONTHS TAFMS)	106	102	135	130	60
PERCENT IN FIRST ENLISTMENT	26%	27%	14%	29%	69%
PERCENT SUPERVISING	36%	42%	86%	14%	0%
AVERAGE NUMBER OF TASKS PERFORMED	93	166	329	9	37
AVERAGE TASK DIFFICULTY PER UNIT OF TIME SPENT (ATDPUTS)	4.5	4.6	5.1	5.0	4.9
JOB DIFFICULTY INDEX (JDI)	13.8	18.6	21.0	7.4	10.0
PERCENT COMPLETING REPROGRAPHICS COURSE AT FT. BELVOIR	5% 15%	2% 0%	0% 31%	0% 14%	8% 54%
PERCENT FEMALE MEMBERS					
PERCENTAGE ROTATING AMONG ORGANIZATIONAL FUNCTIONS	69%	67%	86%	57%	39%

TABLE 10
JOB SATISFACTION AND RELATED DATA FOR CLUSTERS
(PERCENT MEMBERS RESPONDING)

	SUPERVISORS (N=75)	LINE AND HALFTONE, AND LAYOUT AND STRIPPING PERSONNEL (N=28)	OFFSET DILUATOR AND PRINTING PRESS PERSONNEL (N=43)	OFFICE, DUPLICATING, TECHNICIAN-SUPERVISOR PERSONNEL (N=96)	PRINTING PRESS PERSONNEL (N=13)	BINDERY PERSONNEL (N=23)
<u>I FIND MY JOB:</u>						
DULL	3%	7%	19%	19%	2%	15%
SO-SO	9%	25%	16%	25%	16%	4%
INTERESTING	88%	68%	61%	55%	78%	1%
<u>MY JOB UTILIZES MY TALENTS:</u>						
NOT AT ALL TO VERY LITTLE	5%	21%	23%	25%	15%	15%
FAIRLY WELL OR BETTER	95%	79%	77%	66%	85%	77%
<u>MY JOB UTILIZES MY TRAINING:</u>						
NOT AT ALL TO VERY LITTLE	8%	18%	9%	20%	11%	31%
FAIRLY WELL OR BETTER	92%	82%	79%	79%	59%	69%
<u>REENLISTMENT INTENTIONS:</u>						
WILL RETIRE	21%	7%	2%	1%	27%	15%
PLAN NOT TO REENLIST	11%	36%	40%	45%	13%	39%
PLAN TO REENLIST	68%	57%	51%	51%	60%	51%

NOTE: COLUMNS MAY NOT ADD UP TO 100% DUE TO "NO RESPONSE".

TABLE 11
JOB SATISFACTION AND RELATED DATA FOR INDEPENDENT JOB TYPES
(PERCENT MEMBERS RESPONDING)

	OFFSET DUPLICATOR, BINDERY, AND ELECTROSTATIC MASTER PERSONNEL (N=39)	PRINTING PRESS, OFFSET DUPLICATOR, AND BINDERY PERSONNEL (N=55)	PRINTING PRESS, AND BINDERY TRAINERS (N=7)	PRODUCTION CONTROL PERSONNEL (N=7)	MICROGRAPHIC PERSONNEL (N=13)
<u>I FIND MY JOB:</u>					
DULL	18%	11%	29%	14%	0%
SO-SO	26%	20%	14%	14%	23%
INTERESTING	56%	67%	43%	71%	77%
<u>MY JOB UTILIZES MY TALENTS:</u>					
NOT AT ALL TO VERY LITTLE FAIRLY WELL OR BETTER	23% 72%	33% 66%	0% 86%	57% 43%	23% 77%
<u>MY JOB UTILIZES MY TRAINING:</u>					
NOT AT ALL TO VERY LITTLE FAIRLY WELL OR BETTER	18% 80%	16% 82%	0% 86%	29% 71%	15% 85%
<u>REENLISTMENT INTENTIONS:</u>					
WILL RETIRE	3%	9%	14%	28%	0%
PLAN NOT TO REENLIST	15%	15%	29%	29%	46%
PLAN TO REENLIST	82%	71%	57%	43%	54%

NOTE: COLUMNS MAY NOT ADD UP TO 100% DUE TO "NO RESPONSE"

TABLE 12
PREVIOUS AFSCS HELD PRIOR TO AFSC 703X0 ACCORDING TO JOB GROUPS

JOB GROUPS	PREVIOUS AFSCS HELD				
	713X0	713X1	713X2	OTHER	
SUPERVISORS CLUSTER	43%	15%	28%	14%	
LINe AND HALFTONE, AND LAYOUT AND STRIPPING PERSONNEL CLUSTER	36%	32%	14%	11%	
OFFSET DUPLICATOR AND PRINTING PRESS PERSONNEL CLUSTER	26%	7%	25%	42%	
OFFSET DUPLICATOR PERSONNEL CLUSTER	33%	3%	24%	35%	
OFFSET DUPLICATOR, BINDERY, AND ELECTROSTATIC MASTER PERSONNEL INDEPENDENT JOB TYPE	44%	2%	44%	10%	
OFFSET DUPLICATOR TECHNICIAN-SUPERVISOR PERSONNEL CLUSTER	35%	4%	51%	9%	
PRINTING PRESS, OFFSET DUPLICATOR, AND BINDERY PERSONNEL INDEPENDENT JOB TYPE	31%	11%	27%	31%	
PRINTING PRESS AND BINDERY TRAINERS INDEPENDENT JOB TYPE	14%	29%	14%	29%	
PRINTING PRESS PERSONNEL CLUSTER	31%	0%	8%	61%	
BINDERY PERSONNEL CLUSTER	35%	13%	22%	30%	
PRODUCTION CONTROL PERSONNEL INDEPENDENT JOB TYPE	71%	0%	29%	0%	
MICROGRAPHICS PERSONNEL INDEPENDENT TYPE	31%	23%	8%	23%	

NOTE: LINES MAY NOT ADD UP TO 100% DUE TO "NO RESPONSE"

TABLE 13

FUNCTIONAL AREA MAJORITY OF TIME SPENT ACCORDING TO JOB TYPES
(PERCENT MEMBERS RESPONDING)

JOB TYPES	FUNCTIONAL AREA						TOTAL*
	PRINTING	DUPPLICATING	LITHOGRAPHY	BINDING	MICROGRAPHICS	OTHER	
SUPERVISORS LINE AND HALFTONE, AND LAYOUT AND STRIPPING PERSONNEL	8%	25%	1%	3%	5%	52%	94%
OFFSET DUPLICATOR AND PRINTING PRESS PERSONNEL	7%	11%	68%	7%	4%	0%	97%
OFFSET DUPLICATOR PERSONNEL	61%	37%	0%	2%	0%	0%	100%
OFFSET DUPLICATOR, BINDERY, AND ELECTROSTATIC MASTER PERSONNEL	34%	59%	0%	2%	0%	2%	97%
OFFSET DUPLICATOR TECHNICIAN-							
SUPERVISOR PERSONNEL	18%	44%	3%	18%	0%	15%	98%
PRINTING PRESS, OFFSET DUPLICATOR, AND BINDERY PERSONNEL	9%	55%	0%	6%	0%	29%	99%
PRINTING PRESS AND BINDERY TRAINERS	40%	22%	7%	15%	0%	15%	99%
PRINTING PRESS PERSONNEL	14%	14%	14%	0%	0%	29%	71%
BINDERY PERSONNEL	84%	0%	0%	8%	0%	8%	100%
PRODUCTION CONTROL PERSONNEL	22%	4%	0%	74%	0%	0%	100%
MICROGRAPHICS PERSONNEL	14%	29%	0%	0%	43%	86%	100%
	0%	0%	0%	0%	0%	0%	100%

* NOTE: ROWS MAY NOT ADD UP TO 100% DUE TO "NO RESPONSE"

ANALYSIS OF DAFSC GROUPS

Progression in a career ladder is usually accompanied by changes in the jobs performed. An analysis of the DAFSC groups and a comparison of these groups with the career ladder structure may reveal these changes. This information can then be compared to career ladder documents such as the AFR 39-1 Specialty Descriptions and the Specialty Training Standards (STS) in order to measure their accuracy.

Tables 14, 15, and 16 give representative tasks performed according to DAFSC groups and Table 17 presents the relative percent time spent on duties by skill level groups. From these tables, it can be seen, as is typically the case, managerial and supervisory duties consume increasing amounts of time with skill level advancement. Three- and 5-skill level personnel spent the most time in technical areas, with the 7-skill level respondents providing a transition to the highly managerial and supervisory job of the 9-skill level incumbents. The representative tasks performed by these groups also indicates a transition from a technical to a more supervisory job with advancement.

Table 18 provides the distribution of DAFSC groups across the major job groups identified in the career ladder structure. Again, the more supervisory and managerial jobs are not performed by many 3-skill level incumbents. Five- and 7-skill level personnel form the bulk of the career field.

Three-skill level respondents spent the most time of any group performing micrographic functions. This duty seemed to be performed less with increasing skill level--probably as a result of the relatively recent introduction of the micrographics duty into the career ladder. Printing, duplicating, photolithography, and binding were work areas indicated by many 3- and 5-skill level incumbents and, to a lesser degree, by 7-skill level respondents. This again supports the contention that increasing skill level means decreasing time spent on technical functions.

Overall, the 703X0 career ladder follows the typical pattern of job advancement found in most career ladders. With increasing skill level, personnel spend increasing amounts of time in more managerial and supervisory areas.

TABLE 14
REPRESENTATIVE TASKS PERFORMED BY DAFSC 70330 AND 70350 PERSONNEL

TASKS	PERCENT PERFORMING (N=350)
H189 ADJUST IMAGE ON OFFSET DUPLICATORS (OD)	73
H195 ADJUST OD INK FLOW	73
H205 MIX OD FOUNTAIN SOLUTIONS	71
H228 RUN MASTERS THROUGH MASTER CONVERTERS	70
H229 SET OD COUNTERS	69
H206 MOISTEN DUPLICATING DAMPENING ROLLERS	69
H207 MOUNT OD BLANKETS ON BLANKET CYLINDERS	69
H208 MOUNT OD MASTERS ON MASTER CYLINDERS	68
H197 ADJUST OD PILE HEIGHT CONTROLS	68
H190 ADJUST FEEDING UNIT BLOWERS	68
H226 REPLENISH OD INK FOUNTAINS	67
H212 REMOVE OD MASTERS AND CLEAN BLANKETS	67
H191 ADJUST OD GUIDES OR CYLINDERS	66
H203 LOAD OD FEEDER SYSTEMS	63
I261 OPERATE COLLATORS	63
H201 CLEAN OD FEEDER ROLLERS	62
I284 STAPLE PAPER	62
I262 OPERATE CUTTERS	61
H230 SET OD MULTISHEET DETECTORS	61
I245 COLLATE PAPER BY HAND	61
H198 ADJUST OD ROLLERS	60
H227 REPLENISH ODs WITH FOUNTAIN SOLUTIONS OTHER THAN INK	60
H199 ADJUST PRESSURE BETWEEN MASTER CYLINDERS AND BLANKET CYLINDERS	60
H204 LUBRICATE ODs	59
I263 OPERATE DRILLS	59

TABLE 15
REPRESENTATIVE TASKS PERFORMED BY DAFSC 70370 PERSONNEL

TASKS	PERCENT PERFORMING (N=149)
A5 DETERMINE WORK PRIORITIES	77
B50 REVIEW PRINTING REQUESTS	73
B33 DETERMINE MOST ECONOMICAL METHODS OF REPRODUCTION	72
B32 COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED PROBLEMS	67
C90 PREPARE APRS	67
A8 DEVELOP WORK METHODS OR PROCEDURES	66
A11 ESTABLISH ORGANIZATIONAL POLICIES, OFFICE INSTRUCTIONS OR STANDARD OPERATING PROCEDURES	66
E133 MAINTAIN LOGS OF JOBS PROCESSED	64
B35 DIRECT EQUIPMENT MAINTENANCE	64
A12 ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	64
B56 SUPERVISE REPROGRAPHIC SPECIALISTS (AFSC 70350)	62
B44 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	62
A14 ESTABLISH PRODUCTION CONTROLS	62
B52 SCHEDULE WORK ASSIGNMENTS	62
B60 WRITE CORRESPONDENCE	61
C62 ANALYZE WORKLOAD REQUIREMENTS	60
F151 ADVISE USERS ON COPYING PROCEDURES	59
A22 PLAN WORK ASSIGNMENTS	59
A7 DEVELOP STANDARDS FOR PRINTED MATERIALS	59
B45 INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES	58
B38 DIRECT UTILIZATION OF EQUIPMENT	57
B49 PREPARE REQUISITIONS FOR SUPPLIES OR EQUIPMENT	56
C61 ACCOUNT FOR MATERIALS EXPENDED	56
C65 EDIT COMPLETED WORK FOR COMPLIANCE WITH WORK REQUESTS	55
B37 DIRECT QUALITY CONTROL PROGRAMS	55
E149 PICK UP SUPPLIES	55

TABLE 16
REPRESENTATIVE TASKS PERFORMED BY DAFSC 70390 PERSONNEL

TASKS	PERCENT PERFORMING (N=10)
B50 REVIEW PRINTING REQUESTS	100
B60 WRITE CORRESPONDENCE	90
A11 ESTABLISH ORGANIZATIONAL POLICIES, OFFICE INSTRUCTIONS, OR STANDARD OPERATING PROCEDURES	90
A9 DRAFT BUDGET OR FINANCIAL REQUIREMENTS	80
C90 PREPARE APRS	80
B32 COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED PROBLEMS	80
C71 ENDORSE AIRMAN PERFORMANCE REPORTS (APRS)	80
A12 ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	80
A4 DETERMINE REQUIREMENTS FOR SPACE, EQUIPMENT, PERSONNEL, OR SUPPLIES	80
A5 DETERMINE WORK PRIORITIES	80
B41 IMPLEMENT SECURITY PROGRAMS	80
A3 CALCULATE VALUE OF EQUIPMENT	80
A1 ASSIGN PERSONNEL TO DUTY POSITIONS	80
C73 EVALUATE BUDGET OR FINANCIAL REQUIREMENTS	70
B58 SUPERVISE REPROGRAPHIC TECHNICIANS (AFSC 70370)	70
C62 ANALYZE WORKLOAD REQUIREMENTS	70
C61 ACCOUNT FOR MATERIALS EXPENDED	70
C75 EVALUATE EQUIPMENT BEFORE PURCHASE OR RENTAL	70
A27 SCHEDULE LEAVES OR PASSES	70
C77 EVALUATE INSPECTION REPORTS OR PROCEDURES	70
B33 DETERMINE MOST ECONOMICAL METHODS OF REPRODUCTION	70
B30 COMPLETE PERSONNEL ACTION REQUESTS	70
C78 EVALUATE JOB DESCRIPTIONS	70
B40 IMPLEMENT SAFETY PROGRAMS	70
A8 DEVELOP WORK METHODS OR PROCEDURES	70

TABLE 17
RELATIVE PERCENT TIME SPENT ON DUTIES BY DAFSC GROUPS

DUTIES	DAFSC 70330 PERSONNEL (N=68)	DAFSC 70350 PERSONNEL (N=282)	DAFSC 70370 PERSONNEL (N=149)	DAFSC 70390 PERSONNEL (N=10)
A ORGANIZING AND PLANNING	2	5	12	18
B DIRECTING AND IMPLEMENTING	1	6	17	25
C EVALUATING AND INSPECTING	2	4	11	24
D TRAINING	*	2	5	4
E PERFORMING ADMINISTRATIVE AND SUPPLY FUNCTIONS	3	4	8	10
F PERFORMING COPY MANAGEMENT FUNCTIONS	1	4	7	7
G PERFORMING ELECTROSTATIC MASTER FUNCTIONS	11	10	6	1
H OPERATING AND MAINTAINING OFFSET DUPLICATORS	37	31	12	3
I PERFORMING BINDERY FUNCTIONS	17	16	10	3
J PERFORMING PRINTING PRESS FUNCTIONS	15	10	4	*
K PREPARING LINE OR HALFTONE NEGATIVES OR POSITIVES	4	3	4	2
L PERFORMING LAYOUT AND STRIPPING FUNCTIONS	1	1	2	1
M PERFORMING PLATEROOM FUNCTIONS	1	1	1	*
N PERFORMING MICROGRAPHIC FUNCTIONS	5	3	1	*

* DENOTES LESS THAN ONE PERCENT

TABLE 18
DISTRIBUTION OF DAFSC PERSONNEL ACROSS JOB GROUPS

JOB GROUPS	DAFSC 70330 PERSONNEL	DAFSC 70350 PERSONNEL	DAFSC 70370 PERSONNEL	DAFSC 70390 PERSONNEL
SUPERVISORS (GRP021)	-	17	50	8
LINE AND HALFTONE, AND LAYOUT AND STRIPPING PERSONNEL (GRP052)	4	14	9	1
OFFSET DUPLICATOR AND PRINTING PRESS PERSONNEL (GRP096)	16	25	2	-
OFFSET DUPLICATOR PERSONNEL (GRP106)	22	72	5	-
OFFSET DUPLICATOR, BINDERY, AND ELECTROSTATIC MASTER PERSONNEL (GRP105)	3	31	5	-
OFFSET DUPLICATOR TECHNICIAN SUPERVISOR PERSONNEL (GRP101)	-	14	41	-
PRINTING PRESS, OFFSET DUPLICATOR, AND BINDERY PERSONNEL (GRP114)	6	35	14	-
PRINTING PRESS AND BINDERY TRAINERS (GRP071)	1	3	3	-
PRINTING PRESS PERSONNEL (GRP044)	1	11	1	-
BINDERY PERSONNEL (GRP016)	3	14	6	-
PRODUCTION CONTROLLERS (GRP071)	1	2	4	-
MICROGRAPHICS PERSONNEL (GRP018)	2	8	3	-
NOT GROUPED	9	36	6	1
TOTAL	68	282	149	10

ANALYSIS OF EXPERIENCE (TAFMS) GROUPS

In addition to analyzing the differences in the job performed across skill level groups, it is also necessary to examine the jobs performed by personnel according to their experience in the career ladder. This is accomplished by comparing the different TAFMS groups, with the most extensive analysis being between the first, second, and career enlistment groups.

Table 19 provides the percent time spent on duties by incumbents in the various enlistment groups. As the table displays, with increasing time in the service, more time is spent in the supervisory and managerial areas; however, with increasing experience, less time is spent in the technical areas. This follows the trend noted in skill level progression.

First Enlistment Personnel (1-48 Months TAFMS)

Operating offset duplicators and performing bindery functions consumes the largest amount of first enlistment personnel's job time. These individuals spend half of their job time performing 45 tasks, most of which were offset duplicator or bindery tasks. Illustrating the technical nature of their job, first enlistment personnel had their highest concentrations in the Offset Duplicator and Printing Press Personnel cluster (see Figure 2). Other technical aspects of their job included printing press and micrographics duties which were found to be performed to the greatest extent by first enlistment personnel.

First enlistment individuals revealed the lowest job satisfaction of any experience group (see Table 20), with only 56 percent of the members finding their job interesting and only 41 percent planning to reenlist. Compared to the other experience groups, first enlistment personnel also felt their talents were not very well utilized. In summary, the first enlistment group performs an almost totally technical job and these individuals are the most dissatisfied with their work of any experience group.

Job Satisfaction

An additional comparison which sheds light on job satisfaction in the career field in general is a comparison of job satisfaction indices of 703X0 personnel with personnel in similar career ladders (see Table 20).

Overall, 703X0 personnel report similar job satisfaction to the other comparative career ladders. Second enlistment 703X0 personnel show the most difference from the comparative sample, with these incumbents having slightly higher job satisfaction. Otherwise, the 703X0 is similar to most other career fields performing jobs of a comparative nature.

TABLE 19

RELATIVE PERCENT TIME SPENT ON DUTIES BY TAFMS GROUPS

DUTIES	MONTHS TAFMS				^a (N=33)
	1-48 (N=169)	49-96 (N=87)	97-144 (N=88)	145-192 (N=65)	
A ORGANIZING AND PLANNING	2	5	7	12	13
B DIRECTING AND IMPLEMENTING	3	7	9	11	20
C EVALUATING AND INSPECTING	2	4	7	8	12
D TRAINING	*	2	3	4	5
E PERFORMING ADMINISTRATIVE AND SUPPLY FUNCTIONS	3	5	6	6	8
F PERFORMING COPY MANAGEMENT FUNCTIONS	1	4	5	7	7
G PERFORMING ELECTROSTATIC MASTER FUNCTIONS	11	10	8	7	5
H OPERATING AND MAINTAINING OFFSET DUPLICATORS	37	32	22	18	12
I PERFORMING BINDERY FUNCTIONS	18	14	12	13	10
J PERFORMING PRINTING PRESS FUNCTIONS	12	11	8	9	1
K PREPARING LINE OR HALFTONE NEGATIVES AND POSITIVES	3	3	5	2	4
L PERFORMING LAYOUT AND STRIPPING FUNCTIONS	2	1	3	1	2
M PERFORMING PLATEROOM FUNCTIONS	1	1	2	1	*
N PERFORMING MICROGRAPHIC FUNCTIONS	5	1	2	1	*

* DENOTES LESS THAN ONE PERCENT

FIGURE 1

DISTRIBUTION OF 703X0 FIRST ENLISTMENT PERSONNEL
ACROSS CAREER LADDER JOBS
(PERCENTAGES OF TOTAL FIRST ENLISTMENT PERSONNEL RESPONDING TO SURVEY)

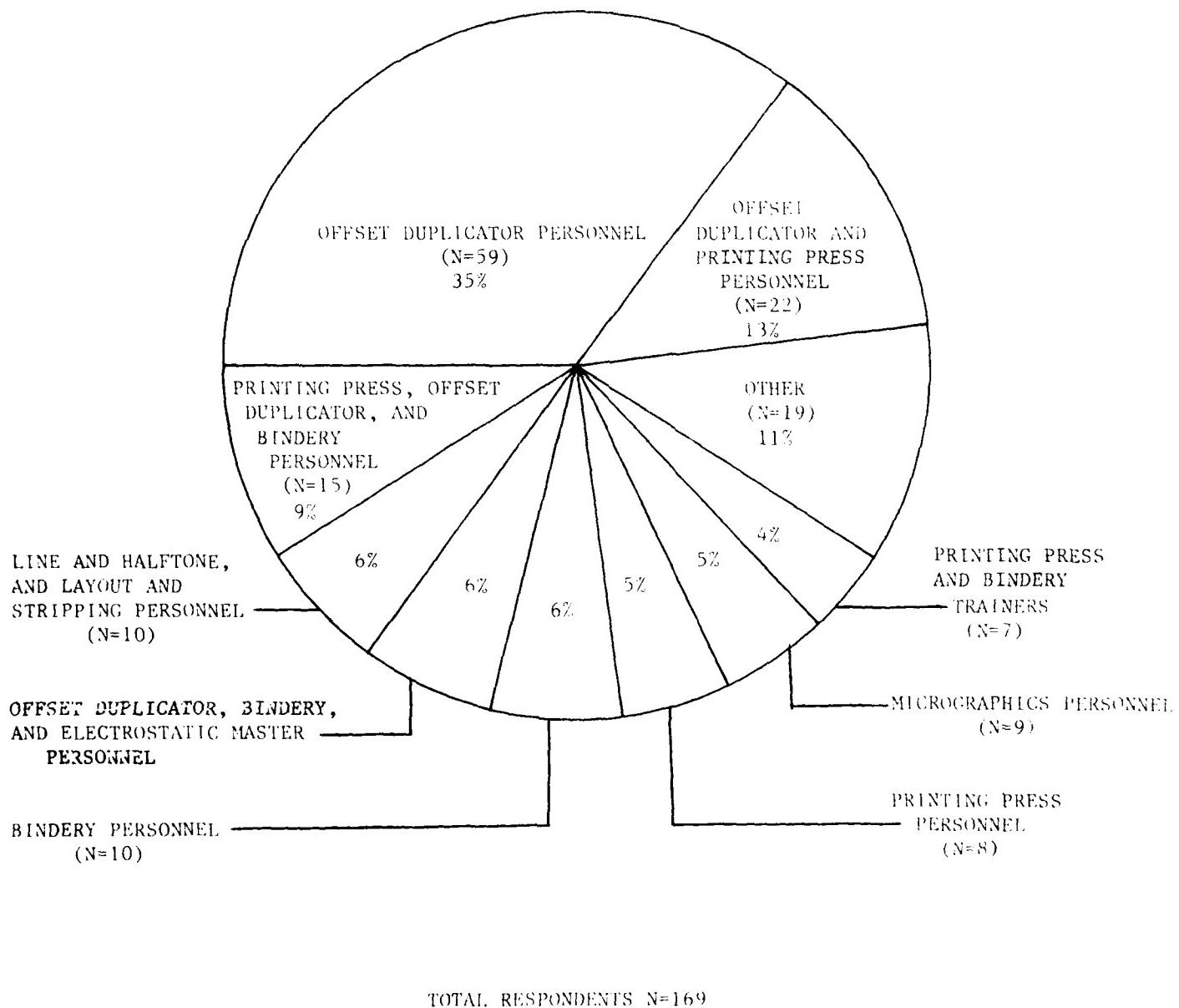


TABLE 20
JOB SATISFACTION INDICES FOR FIRST ENLISTMENT, SECOND ENLISTMENT, AND CAREER 703X0 GROUPS
(PERCENT MEMBERS RESPONDING)

	FIRST ENLISTMENT			SECOND ENLISTMENT			CAREER		
	COMPARATIVE*		703X0 (N=169)	COMPARATIVE*		703X0 (N=87)	COMPARATIVE*		703X0 (N=253) (N=2,274)
	SAMPLE	(N=2,190)		SAMPLE	(N=1,158)		SAMPLE	(N=1,158)	
<u>I FIND MY JOB:</u>									
DULL	21	21		14		18		18	12
SO-SO	22	21		19		22		17	16
INTERESTING	56	58		67		59		74	70
<u>MY JOB UTILIZES MY TALENTS:</u>									
NOT AT ALL TO VERY LITTLE	35	31		17		28		19	22
FAIRLY WELL OR BETTER	63	69		82		72		79	77
<u>MY JOB UTILIZES MY TRAINING:</u>									
NOT AT ALL TO VERY LITTLE	19	22		18		25		17	22
FAIRLY WELL OR BETTER	79	78		81		73		83	77
<u>REENLISTMENT INTENTIONS:</u>									
PLAN NOT TO REENLIST (INCLUDES RETIREES)	56	52		30		35		31	30
PLAN TO REENLIST	41	46		70		64		68	69

NOTE: COLUMNS MAY NOT ADD UP TO 100 PERCENT DUE TO "NO RESPONSE"

* COMPARATIVE SAMPLE INCLUDES PERSONNEL FROM A NUMBER OF SIMILAR COMMAND SUPPORT CAREER FIELDS SURVEYED IN 1980
(INCLUDES AFSC'S: 10XXX, 24XXX, 65XXX, 66XXX, 67XXX, 70XXX, 69XXX, 71XXX, 73XXX, 74XXX, 79XXX, 87XXX)

COMPARISON OF SURVEY DATA TO AFR 39-1 SPECIALTY DESCRIPTIONS

In order to insure accuracy and possibly update the 703X0 AFR 39-1 Specialty Descriptions, occupational survey data were compared against the October 1979 descriptions for DAFSCs 70310/30/50, 70370, and 70390/CEM Code 70200. Overall, the 70310/30/50 and the 70390/CEM Code 70200 documents were found to be accurate representations of the jobs of these personnel. However, possible refinements in the 7-skill level description may be necessary.

While the 70370 AFR 39-1 Specialty Description generally reflects the tasks and duties performed by 7-skill level personnel, the description may be slightly misleading. The present Specialty Description gives the general impression of the technician as performing a technical job, with supervisory duties as a minor consideration. In actuality, 70370 personnel report performing mainly a supervisory job, with technical tasks being a smaller, but still a large part of the job. For example, the technicians responding to this survey reported supervisory duties as absorbing 53 percent of their time, administrative duties eight percent of their time, and technical duties 39 percent of their time.

Consequently, a minor revision of the AFR 39-1 70370 Specialty Description is recommended in which the general emphasis of the duties and responsibilities displayed is shifted from the technical to the supervisory aspect of the job. This might best be accomplished by extending the description and adding further examples of supervisory duties and tasks, since the technical tasks listed give a good broad overview of the technical side of the job.

TRAINING ANALYSIS

Another important use of occupational survey data is in the area of training. Technical school personnel at Ft Belvoir, VA matched survey data with the 703X0 Specialty Training Standard (STS) dated October 1979. Analysis of this matching can reveal possible areas of improvement in the STS. Along with the STS analysis, occupational survey data allow training personnel to examine the percentage of first enlistment personnel performing tasks, the utilization of equipment by incumbents, training emphasis ratings, and task difficulty ratings. A complete computer listing of the percent members performing, training emphasis ratings, and task difficulty ratings, along with the STS matching, has been forwarded to the technical school for its use in reviewing training documents. A summary of that information follows.

Analysis of Task Difficulty

The relative difficulty of each task in the job inventory was assessed by 36 experienced 7-skill level 703X0 NCOs. These tasks were processed to produce an ordered listing of all tasks in terms of their relative difficulty and were standardized to have an average difficulty of 5.0 (standard deviation equals 1.0). (For a more detailed description of these ratings, see the Task Factor Administration section in the INTRODUCTION.)

Table 21 lists those tasks rated most difficult by the 703X0 raters. Generally, these were supervisory and managerial tasks. As Table 23 reveals, the least difficult tasks in the career field tended to be binding and printing press functions. The other duties of the career field fell into the spectrum between the least and most difficult tasks. Typical tasks of average difficulty are presented in Table 22. As can be seen, these cover a number of duty areas. Overall, the more difficult tasks, being supervisory and managerial in nature, are performed by incumbents with more experience in the career ladder. The technical tasks, which tend to have lower task difficulty, are the major concentration of the less experienced personnel in the career ladder. This follows the pattern typically found in most career ladders of increasing task and job difficulty with increasing time in the career field. This is also supported by the analysis of job difficulty indices which follows this section.

Job Difficulty Index (JDI)

Table 24 lists the 12 major job groups identified in the job structure analysis section. The job groups are listed in order from the most to the least difficult job according to their computed Job Difficulty Index (JDI). (The Task Factor Administration section in the INTRODUCTION of this report gives a more detailed description of the Job Difficulty Index.) Groups were rated either very difficult or less difficult, with no jobs falling into the JDI range from 11.5 to 15.0.

As can be seen, the Printing Press and Bindery Trainers reported the most difficult job with a JDI of 21.0. Considering the large number of tasks performed by these individuals, this is not surprising. With an average task difficulty per unit time spent (ATDPUTS - a measure of the relative difficulty of the tasks performed by the group) of 5.1, these incumbents performed more difficult tasks in their job as well. The Supervisors cluster reported performance of the most difficult tasks of all groups, with an ATDPUTS of 5.5; however, their Job Difficulty Index was lower at 16.0, due to the lower average number of tasks performed by these members.

The easiest job reported in the career ladder was that of the Bindery Personnel. This group had a Job Difficulty Index of 7.1 with an ATDPUTS of 4.4. The Production Controllers had the next easiest job with a JDI of 7.4. Generally, the higher difficulty jobs appear to be manned by the more experienced incumbents, and the less difficult jobs by the less experienced personnel.

Analysis of Training Emphasis

The relative training emphasis of each task in the inventory was assessed using ratings of 42 experienced 7-skill level Reprographics NCOs. These ratings were processed to produce an ordered listing of all tasks in terms of their recommended emphasis in the training of first enlistment personnel. The ratings had an average of 3.0 and a standard deviation of 1.7. Results of the analysis of training emphasis are often useful when evaluating specialty training documents, such as the specialty training standard (STS). (For a more complete discussion of these ratings, see the Task Factor Administration section in the INTRODUCTION.)

Table 25 lists those tasks rated highest in training emphasis which are performed by first enlistment personnel. As the table illustrates, the tasks rated highest in training emphasis dealt with offset duplicators, bindery functions, and electrostatic master functions. All but two of the 25 tasks rated the highest in training emphasis had over 50 percent of the first enlistment personnel reporting that they perform them.

Table 26 lists those tasks which senior 703X0 NCOs rate average in training emphasis. The only noticeable trend in these tasks is the lack of a substantial amount of offset duplicator and electrostatic master-related tasks. Only one task in the duty of operating and maintaining offset duplicators, and only one task in the duty of performing electrostatic master functions was rated below average in training emphasis.

Those tasks rated lowest in training emphasis are presented in Table 27. As could be expected, most of these tasks are supervisory or managerial in nature. Few first enlistment personnel reported the performance of these tasks.

Overall, training emphasis ratings indicate that 703X0 senior NCOs feel that the technical tasks, especially in the areas of offset duplicators and electrostatic masters, should have the most emphasis in initial training. Supervisory and managerial tasks need to be trained the least. Administrative tasks tended to fall below average in training emphasis ratings as well. Consequently, according to senior 703X0 personnel, individuals coming into the field should probably be trained mainly in technical areas associated with duplicating.

TABLE 21
EXAMPLES OF TASKS RATED THE MOST DIFFICULT BY SENIOR 703XO PERSONNEL

TASKS	TASK DIFFICULTY	PERCENT MEMBERS PERFORMING (N=509)
A9 DRAFT BUDGET OR FINANCIAL REQUIREMENTS	8.52	21
A25 PREPARE REQUESTS FOR BIDS	7.66	9
C93 WRITE STAFF STUDIES, SURVEYS, OR SPECIAL REPORTS	7.64	12
H232 SET TIMING BETWEEN FEEDING UNITS AND DUPLICATING HEADS	7.42	24
A10 ESTABLISH JOB ORDER COST ACCOUNTING PROCEDURES	7.40	16
H217 REMOVE OR REPLACE OFFSET DUPLICATOR (OD) IMPRESSION CYLINDER GRIPPERS	7.36	17
C73 EVALUATE BUDGET OR FINANCIAL REQUIREMENTS	7.27	18
J294 ADJUST PRINTING PRESS (PP) FEEDER TIMING	7.19	10
J290 ADJUST PP CAMS	7.18	7
B60 WRITE CORRESPONDENCE	7.10	29
A11 ESTABLISH ORGANIZATIONAL POLICIES, OFFICE INSTRUCTIONS, OR STANDARD OPERATING PROCEDURES	7.06	29
A26 PREPARE UNIT EMERGENCY OR DISASTER PLANS	7.01	5
D108 DEVELOP SPECIALTY TRAINING STANDARDS (STS)	7.00	6
H218 REMOVE OR REPLACE OD MASTER CYLINDER CLAMPS	6.96	20
D107 DEVELOP RESIDENT COURSE OR CAREER DEVELOPMENT COURSE (CDC) CURRICULUM MATERIALS	6.95	3
D94 ACT AS UNIT OR STAFF LEVEL TRAINING ADVISOR	6.94	7
A4 DETERMINE REQUIREMENTS FOR SPACE, EQUIPMENT, PERSONNEL, OR SUPPLIES	6.88	31
D105 DEVELOP COURSE CURRICULA	6.87	3
D125 WRITE JUSTIFICATIONS FOR TRAINING FACILITIES, EQUIPMENT, PUBLICATIONS, OR MATERIALS	6.87	4
H223 REMOVE OR REPLACE OD SOLENOIDS	6.85	14
D126 WRITE TEST QUESTIONS	6.77	4
C75 EVALUATE EQUIPMENT BEFORE PURCHASE OR RENTAL	6.65	23
C92 WRITE CIVILIAN PERFORMANCE RATINGS OR SUPERVISORY APPRAISALS	6.60	10
F155 DETERMINE JOB SPECIFICATIONS FOR PREPARING LINE OR HALFTONE NEGATIVES OR POSITIVES	6.57	4
J289 ADJUST PP BACKLASH GEARS	6.57	4

TABLE 22

EXAMPLES OF TASKS RATED AVERAGE IN DIFFICULTY BY SENIOR 703X0 RATERS

TASKS	TASK DIFFICULTY	PERCENT MEMBERS PERFORMING (N=509)
E138 MAKE ENTRIES ON ANNUAL MAP AND/OR CHART PLANT REPORT FORMS (JCP FORM 729)	5.06	2
E145 MAKE ENTRIES ON HQ USAF AND/OR JCP CONTROLLED EQUIPMENT RECORD FORMS (JCP FORM 4)	5.50	19
K360 CLEAN AUTOMATIC FILM PROCESSORS	5.50	6
K354 ADJUST COPYBOARDS	5.50	10
H214 REMOVE OR REPLACE OFFSET DUPLICATOR (OD) DAMPENER COVERS	5.05	53
N454 MIX MICROGRAPHIC CHEMICALS	5.05	4
F156 DETERMINE JOB SPECIFICATIONS OF DUPLICATING JOBS	5.02	20
N459 OPERATE ROLL DIAZO DUPLICATORS	5.01	3
B34 DIRECT DEVELOPMENT OR MAINTENANCE OF STATUS BOARDS, GRAPHS, OR CHARTS	5.01	13
K383 PREPARE COPYBOARDS FOR BACKLIGHTING	5.00	4
N480 TEST FILM RESOLUTION WITH MICROSCOPES	5.00	3
K381 MAKE CONTACT NEGATIVES OR POSITIVES	5.00	6
E140 MAKE ENTRIES ON COMMERCIAL PRINTING REPORT FORMS (JCP FORM 2)	5.00	9
I242 ADJUST STITCHERS	5.00	9
K353 ADJUST CAMERA LIGHTS	5.00	44
E137 MAKE ENTRIES ON ANNUAL INVENTORY OF STORED MACHINERY AND EQUIPMENT FORMS (JCP FORM 6)	5.00	4
L411 INSPECT NEGATIVES	4.99	8
F161 MAINTAIN RECORDS OF COPIER MONITORS	4.99	25
I238 ADJUST FOLDER FEED BOARD STRAPS	4.99	7
N451 LOAD BULK FILMS INTO MICROGRAPHICS EQUIPMENT (ME)	4.99	3
K385 PREPARE FILM PROCESSOR CLEANING SOLUTIONS	4.98	4
J301 ADJUST PP PILE HEIGHT INDICATORS	4.98	22
I265 OPERATE GATHERERS	4.97	10
E141 MAKE ENTRIES ON CONSOL. DUPL. CTR. AND FACS. REPORT OF JOBS PROD. WHICH EXCEED JCP DUPL. LIMIT. FORMS (AF FORM 337)	4.97	15
I268 OPERATE PERFORMING MACHINES	4.97	3

TABLE 23

EXAMPLES OF TASKS RATED THE LEAST DIFFICULT BY SENIOR 703X0 PERSONNEL

TASKS	TASK DIFFICULTY	PERCENT MEMBERS PERFORMING (N=509)
I258 LUBRICATE STITCHERS	3.33	26
H231 SET OFFSET DUPLICATOR (OD) RECEIVING TRAY JOGERS	3.32	49
L407 CLEAN OPAQUE BRUSHES	3.30	6
J341 REPLENISH PRINTING PRESS (PP) POWDER SPRAY ATTACHMENTS	3.28	4
I246 COLLATE PAPER USING ROTATING TABLES	3.26	10
H227 REPLENISH ODs WITH FOUNTAIN SOLUTIONS OTHER THAN INK	3.26	53
J326 POSITION PP DELIVERY DOLLIES	3.18	6
I287 WRAP PRINTED MATERIALS MANUALLY	3.17	15
H226 REPLENISH OD INK FOUNTAINS	3.11	60
J310 CLEAN PP EXTERIORS	3.10	24
J340 REPLENISH PP INK FOUNTAINS	3.10	22
I257 LUBRICATE SPIRAL BINDERS	3.10	3
J342 REPLENISH PP WATER FOUNTAINS	3.05	21
I284 STAPLE PAPER	3.05	58
J348 SET PP COUNTERS	3.05	23
G188 TRIM DUPLICATING MASTERS	3.03	44
K391 REMOVE OR REPLACE CAMERA LENS CAPS	3.02	6
F166 OPERATE OFFICE COPIERS	3.01	27
I245 COLLATE PAPER BY HAND	2.96	56
I277 PUNCH HOLES IN PAPER USING MANUAL PUNCHERS	2.95	21
I248 HAND MARRY SETS	2.83	50
J317 DESTROY PRINTING PLATES	2.77	15
I247 FOLD PAPER MANUALLY	2.66	19
H228 RUN MASTERS THROUGH MASTER CONVERTERS	2.34	62
H229 SET OD COUNTERS	2.26	62

TABLE 24
703X0 JOBS IN ORDER OF JOB DIFFICULTY INDEX (JDI)

<u>GROUPS</u>	JDI*	ATDPUTS**	AVERAGE NUMBER OF TASKS PERFORMED
PRINTING PRESS AND BINDERY TRAINERS (N=7)	21.0	5.1	329
OFFSET DUPLICATOR TECHNICIAN SUPERVISOR PERSONNEL (N=55)	18.8	4.9	143
PRINTING PRESS, OFFSET DUPLICATOR, AND BINDERY PERSONNEL (N=55)	18.6	4.6	166
SUPERVISORS (N=75)	16.0	5.5	78
LINE AND HALFTONE, AND LAYOUT AND STRIPPING PERSONNEL (N=28)	15.0	4.7	103
PRINTING PRESS PERSONNEL (N=13)	11.5	4.6	67
OFFSET DUPLICATOR AND PRINTING PRESS PERSONNEL (N=43)	11.4	4.2	80
MICROGRAPHICS PERSONNEL (N=13)	10.0	4.9	37
OFFSET DUPLICATOR PERSONNEL (N=99)	8.4	4.1	50
PRODUCTION CONTROLLERS (N=7)	7.4	5.0	9
BINDERY PERSONNEL (N=23)	7.1	4.4	30

* RELATIVE JOB DIFFICULTY OF SPECIALTY JOBS AS PREDICTED USING A FORMULA DEVELOPED BY RESEARCH OF THE AIR FORCE HUMAN RESOURCES LABORATORY.
AVERAGE JOB DIFFICULTY (MEAN) IS SET AT 13.0.

** AVERAGE TASK DIFFICULTY PER UNIT TIME SPENT (ATDPUTS) IS CALCULATED USING A FORMULA DEVELOPED BY RESEARCH OF THE AIR FORCE HUMAN RESOURCES LABORATORY.

TABLE 25
703X0 TASKS RATED HIGHEST IN TRAINING EMPHASIS

TASKS	TRAINING EMPHASIS	PERCENT MEMBERS PERFORMING (1-48 MOS TAFMS)
H195 ADJUST INK FLOW	7.00	72
H205 MIX OFFSET DUPLICATOR (OD) FOUNTAIN SOLUTIONS	6.90	69
H197 ADJUST OD PILE HEIGHT CONTROLS	6.76	65
H189 ADJUST IMAGE ON OFFSET DUPLICATORS	6.74	72
G180 COMPUTE AMOUNT OF ENLARGEMENT OR REDUCTION OF IMAGES	6.69	53
I261 OPERATE COLLATORS	6.69	61
I262 OPERATE CUTTERS	6.69	62
H198 ADJUST OD ROLLERS	6.67	56
H207 MOUNT OD BLANKETS ON BLANKET CYLINDERS	6.67	65
H199 ADJUST PRESSURE BETWEEN MASTER CYLINDERS AND BLANKET CYLINDERS	6.64	54
H204 LUBRICATE ODs	6.64	55
H191 ADJUST OD GUIDES OR CYLINDERS	6.62	62
H230 SET OD MULTISHEET DETECTORS	6.62	58
H214 REMOVE OR REPLACE OD DAMPENER COVERS	6.55	54
H190 ADJUST OD FEEDING UNIT BLOWERS	6.52	66
I263 OPERATE DRILLS	6.45	57
H196 ADJUST OD PAPER BUCKLES	6.40	52
H206 MOISTEN DUPLICATING DAMPENING ROLLERS	6.33	69
G179 CLEAN ELECTROSTATIC MASTER IMAGER (EMI) GLASS, COPYBOARDS, MIRRORS, OR LENSES	6.26	50
G182 MAKE CORRECTIONS ON ELECTROSTATIC MASTERS	6.24	48
I279 REMOVE OR REPLACE CUTTING BLADES	6.24	18
H208 MOUNT OD MASTERS ON MASTER CYLINDERS	6.19	65
G170 ADJUST EMI EXPOSURE TIME	6.14	56
H203 LOAD OD FEEDER SYSTEMS	6.14	60
G185 REMOVE OR REPLACE EMI BIASES	6.10	25

TABLE 26
703X0 TASKS RATED AVERAGE IN TRAINING EMPHASIS

TASKS	TRAINING EMPHASIS	PERCENT MEMBERS PERFORMING (1-48 MOS TAFMS)
N457 OPERATE CAMERAS	3.17	10
M427 CLEAN DEVELOPING (RUB UP) TABLES	3.14	5
E144 MAKE ENTRIES ON EQUIPMENT MAINTENANCE RECORDS	3.12	5
J296 ADJUST PRINTING PRESS (PP) GRIPPER FINGERS	3.12	16
K368 CLEAN VACUUM PUMPS	3.12	4
K378 LOAD OR UNLOAD SHEET FILM	3.12	5
I287 WRAP PRINTED MATERIALS MANUALLY	3.07	12
J322 MIX INKS	3.07	7
J336 REMOVE OR REPLACE PP SIDE GUIDES	3.05	11
K391 REMOVE OR REPLACE CAMERA LENS CAPS	3.05	6
L420 REMOVE OR REPLACE BULBS IN LIGHT TABLES	3.05	6
J331 REMOVE OR REPLACE GRIPPER FINGERS	3.02	9
J341 REPLENISH PP POWDER SPRAY ATTACHMENTS	3.02	4
K380 LUBRICATE VACUUM PUMPS	3.02	2
J351 TEST PAPER HUMIDITY	3.00	7
N463 PERFORM OPERATOR MAINTENANCE ON MICROGRAPHIC EQUIPMENT	3.00	5
I274 PACK PRINTED MATERIALS MANUALLY	2.98	24
K383 PREPARE COPYBOARDS FOR BACKLIGHTING	2.95	3
L422 SCRIBE LINES ON NEGATIVES	2.95	4
M430 CORRECT DENSITIZED PLATES	2.95	5
L417 PREPARE NEGATIVES OR POSITIVES FOR REPRODUCABLES	2.93	8
G187 TEST HUMIDITY IN EMIs	2.91	11
I260 OPERATE BOOK TRIMMERS	2.91	2
N471 SELECT REDUCTION RATIOS	2.91	7
C61 ACCOUNT FOR MATERIALS EXPENDED	2.88	7

TABLE 27
703X0 TASKS RATED LOWEST IN TRAINING EMPHASIS

<u>TASKS</u>	<u>TRAINING EMPHASIS</u>	<u>PERCENT MEMBERS PERFORMING (1-48 MOS TAFMS)</u>
B47 MAINTAIN PUBLICATION LIBRARIES	.31	4
C91 SELECT INDIVIDUALS FOR SPECIALIZED TRAINING	.31	1
D114 EVALUATE PROGRESS OF RESIDENT COURSE STUDENTS	.31	1
C76 EVALUATE INDIVIDUALS FOR PROMOTION, DEMOTION, OR RECLASSIFICATION	.29	1
D95 ADMINISTER TESTS	.29	1
A26 PREPARE UNIT EMERGENCY OR DISASTER PLANS	.26	3
B30 COMPLETE PERSONNEL ACTION REQUESTS	.26	3
B46 MAINTAIN CONTINGENCY PLANS	.26	2
D106 DEVELOP LESSON PLANS	.26	1
C72 ENDORSE CIVILIAN PERFORMANCE RATINGS OR SUPERVISORY APPRAISALS	.24	2
D104 DETERMINE RESIDENT COURSE TRAINING REQUIREMENTS	.24	1
D107 DEVELOP RESIDENT COURSE OR CAREER DEVELOPMENT COURSE (CDC) CURRICULUM MATERIALS	.24	1
D127 WRITE TRAINING REPORTS	.24	1
B53 SUPERVISE ADMINISTRATION PERSONNEL (AFSC 702X0)	.21	2
A10 ESTABLISH JOB ORDER COST ACCOUNTING PROCEDURES	.19	4
C93 WRITE STAFF STUDIES, SURVEYS, OR SPECIAL REPORTS	.19	2
B31 CONDUCT STAFF MEETINGS	.17	2
A9 DRAFT BUDGET OR FINANCIAL REQUIREMENTS	.14	5
A28 SCHEDULE PERSONNEL FOR SCHOOL, TEMPORARY DUTY (TDY) ASSIGNMENTS, OR NONTECHNICAL TRAINING	.14	2
D105 DEVELOP COURSE CURRICULA	.12	1
A15 ESTABLISH PUBLICATION LIBRARIES	.09	2
A25 PREPARE REQUESTS FOR BIDS	.09	2
B57 SUPERVISE REPROGRAPHIC SUPERINTENDENTS (AFSC 70390)	.09	1
D97 ASSIGN RESIDENT COURSE INSTRUCTORS	.09	1
B58 SUPERVISE REPROGRAPHIC TECHNICIANS (AFSC 70370)	.00	2

ANALYSIS OF THE 703X0 SPECIALTY TRAINING STANDARD (STS)

The 703X0 Specialty Training Standard, dated October 1979, was reviewed against survey data for Reprographics personnel in the different skill level groups. Subject matter specialists at the 3300 TCHTW (Keesler AFB, MS) assisted in the analysis by matching job inventory tasks to specific paragraphs in the STS. Each item in the STS was analyzed using task difficulty, training emphasis, and percent members performing vectors. The STS was also examined to insure that all jobs identified in the career ladder structure were included in the document.

Overall, the 703X0 STS provides a comprehensive overview of the jobs performed and equipment used by Reprographics personnel. No areas needing review were found.

ANALYSIS OF CONUS VERSUS OVERSEAS GROUPS

In some career ladders, personnel stationed overseas perform a different job than those personnel stationed within the Continental United States (CONUS). Because of this possibility, a comparison was made of the tasks performed and the background data of DAFSC 70350 respondents assigned within the CONUS versus those at overseas locations. Being the major technicians of the career field, only the 5-skill level personnel were examined because this comparison will be the most likely to reveal technical differences in the nature of the jobs performed.

Generally, it was found that CONUS and overseas specialists perform about the same job. However, as revealed in Table 28, there are some minor differences in the tasks performed by these respondents. Referencing the lower half of Table 28, it can be seen that some electrostatic master functions are performed to a higher degree by overseas personnel. CONUS personnel, on the other hand, do more of certain bindery and printing press tasks than overseas personnel (as illustrated in the upper half of Table 28). It is noteworthy, however, that these bindery and printing press tasks, though performed by a greater proportion of CONUS as compared to overseas personnel, are still not performed by a high percentage of the CONUS specialists.

Along with the minor task differences noted between the CONUS and overseas personnel, there were also some minor background differences noted. The level of organization at which the respondents worked was one area where differences were found. Fifteen percent of the CONUS respondents reported a major command level of organization as compared to only six percent of the overseas respondents. CONUS specialists also work in a plant level of organization more than overseas respondents with 11 percent of the CONUS respondents reporting this level and no overseas respondents reporting it. In contrast, more overseas incumbents reported a wing level of organization with 19 percent responding as compared to only four percent of the CONUS incumbents. Work areas reported by the personnel was another slight difference between the two groups. A higher percentage of CONUS personnel (84 percent) reported a Copier Manager work area than did overseas personnel (70 percent). CONUS respondents also spent more time in the Reproduction Manager work area than overseas personnel (92 as compared to 83 percent).

Finally, some differences were also discovered in the equipment used by the specialists. Overseas personnel use more bindery machines with 67 percent of their members using the equipment compared to 51 percent of the CONUS incumbents reporting the use of this equipment. More overseas specialists also use Total Copy Systems than CONUS personnel (95 versus 84 percent). However, more CONUS personnel use single head drills (60 percent) and single sheet collators (81 percent) than overseas personnel (46 percent use the drills and 67 percent use the collators). As this comparison reveals, the differences noted in all of these areas were noticeable, but not extreme.

Consequently, it can be concluded that the differences between CONUS and overseas 703X0 personnel, as determined by a comparison of the 5-skill level incumbents in each group, are minor in nature, with the proportionately greater performance of certain electrostatic master tasks by overseas as compared to CONUS personnel being the only notable task difference. Background data also varied between groups, but no difference of substantial interest was found.

TABLE 28

TASKS BEST DISTINGUISHING DAFSC 70350 CONUS AND OVERSEAS PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS		CONUS PERSONNEL (N=216)	OVERSEAS PERSONNEL (N=63)	DIFFERENCE
I275	PERFORM PADDING OPERATIONS	35	21	14
I242	ADJUST STITCHERS	50	38	12
I264	OPERATE FOLDERS	13	3	10
J300	ADJUST PP PAPER CALIPERS	16	6	10
J328	PREPARE PP BLANKETS FOR MOUNTING	22	13	9
J307	ADJUST PP WATER ROLLERS	29	21	8
I240	ADJUST FOLDER ROLLERS	9	2	7
I237	ADJUST FOLDER DEFLECTORS	10	3	7
I271	OPERATE STITCHERS	52	45	7
J299	ADJUST PP INK ROLLERS	26	19	7
G179	CLEAN EMI GLASS, COPYBOARDS, MIRRORS, OR LENSES	48	71	-23
G183	PREPARE OFFSET PLATES USING EMIs	47	70	-23
G168	ADJUST ELECTROSTATIC MASTER IMAGER (EMI) APERTURES	47	70	-23
G170	ADJUST EMI EXPOSURE TIME	54	76	-22
G188	TRIM DUPLICATING MASTERS	43	65	-22
A5	DETERMINE WORK PRIORITIES	42	63	-21
G175	ADJUST EMI TONER FEED	41	62	-21
A12	ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	16	36	-21
G185	REMOVE OR REPLACE EMI BIASES	36	56	-20
G182	MAKE CORRECTIONS ON ELECTROSTATIC MASTERS	49	68	-19

ANALYSIS OF MAJOR COMMAND DIFFERENCES

Another dimension along which the jobs performed by individuals may vary is Major Command (MAJCOM). As a result of this, an examination of the tasks and duties performed by incumbents according to MAJCOM is necessary. Seven major commands, comprising 88 percent of the sample, were examined. These major commands were: 1) Strategic Air Command (SAC); 2) Tactical Air Command (TAC); 3) Military Airlift Command (MAC); 4) Air Training Command (ATC); 5) United States Air Forces Europe (USAFE); 6) Pacific Air Forces (PACAF); and 7) Air Force Systems Command (AFSC).

The four tables at the end of this section provide job and background information for the MAJCOM groups. Table 29 gives a listing of each MAJCOM and the percentage of time members report spending on each duty; Table 30 provides general background information for the major commands; and Table 31 lists the job satisfaction indices for the groups. Table 32 shows the distribution of each command across the various job groups identified in the CAREER LADDER STRUCTURE.

Overall, there were only minor differences between the major commands in terms of the time spent on duties and the tasks performed. The largest difference was with AFSC personnel. These personnel spent the greatest amount of time of any major command in the area of performing micrographics functions. Sixteen percent of their job time was spent in this area as compared to no more than five percent for the other major commands. AFSC personnel compensated by spending the least time of any major command performing electrostatic master functions.

As for background differences, MAC had the largest concentration of female respondents with 32 percent and USAFE had the smallest concentration with only 10 percent. USAFE had the broadest job, with members reporting performance of an average of 104 tasks. Most major commands had a majority of respondents indicating that they rotate among the various organizational functions; however, AFSC was an exception, with only 23 percent of these members indicating such rotation. Another interesting fact about AFSC is that none of these respondents reported completion of the Reprographics course at Ft Belvoir. The major command with the largest percentage of these graduates was ATC with 16 percent of their members reporting completion of the course.

In terms of job satisfaction, only 59 percent of SAC respondents found their job interesting; this was the lowest of any major command. AFSC personnel indicated the least satisfaction with training, with only 59 percent of these incumbents indicating feelings that their job utilizes their training well. AFSC also had the lowest reenlistment intentions, with only 50 percent of these individuals indicating plans to reenlist. ATC had the highest reenlistment intentions; 66 percent of these respondents reported plans to reenlist. No other significant job satisfaction differences were noted for the major commands.

TABLE 29
RELATIVE PERCENT TIME SPENT ON DUTIES BY 703X0 MAJOR COMMAND GROUPS

DUTY	SAC (N=135)	TAC (N=74)	MAC (N=68)	ATC (N=64)	USAFE (N=61)	PACAF (N=24)	AFSC (N=22)
A ORGANIZING AND PLANNING	6	5	8	8	8	11	7
B DIRECTING AND IMPLEMENTING	8	8	9	10	10	12	9
C EVALUATING AND INSPECTING	5	7	6	6	6	11	8
D TRAINING	2	3	3	3	3	3	2
E PERFORMING ADMINISTRATIVE AND SUPPLY FUNCTIONS	5	5	6	4	7	7	5
F PERFORMING COPY MANAGEMENT FUNCTIONS	5	3	2	2	6	9	5
G PERFORMING ELECTROSTATIC MASTER FUNCTIONS	10	7	9	8	10	10	3
H OPERATING AND MAINTAINING OFFSET DUPLICATORS	24	22	27	30	26	23	22
I PERFORMING BINDERY FUNCTIONS	16	15	13	14	13	12	13
J PERFORMING PRINTING PRESS FUNCTIONS	9	13	9	8	8	1	4
K PREPARING LINE OR HALFTONE NEGATIVES AND POSITIVES	4	6	2	4	1	1	4
L PERFORMING LAYOUT AND STRIPPING FUNCTIONS	2	3	1	2	*	*	1
M PERFORMING PLATEROOM FUNCTIONS	2	1	*	1	*	*	1
N PERFORMING MICROGRAPHIC FUNCTIONS	2	2	5	*	*	*	16

*DENOTES LESS THAN ONE PERCENT

TABLE 30
BACKGROUND INFORMATION ACCORDING TO MAJOR COMMANDS

	<u>SAC</u>	<u>TAC</u>	<u>MAC</u>	<u>ATC</u>	<u>USAFE</u>	<u>PACAF</u>	<u>AFSC</u>
NUMBER IN GROUP:	135	74	68	64	61	24	22
PERCENT OF SAMPLE:	27%	15%	13%	12%	12%	5%	4%
PERCENT LOCATED OVERSEAS:	5%	5%	6%	2%	100%	100%	0%
<u>DAFSC DISTRIBUTION:</u>							
70330	16%	16%	15%	17%	10%	13%	18%
70350	56%	57%	63%	50%	54%	54%	50%
70370	26%	26%	22%	30%	36%	25%	27%
70390	2%	1%	0%	3%	0%	8%	5%
AVERAGE GRADE:	4.7	4.5	4.3	4.6	4.9	4.9	5.0
AVERAGE TIME IN CAREER FIELD (MONTHS TICF):	86	79	82	87	91	83	86
AVERAGE TIME IN SERVICE (MONTHS TAFMS):	104	102	96	109	117	110	115
<u>AVERAGE NUMBER OF TASKS PERFORMED:</u>							
PERCENT IN FIRST ENLISTMENT:	95	93	73	66	104	69	67
PERCENT SUPERVISING:	36%	45%	44%	38%	26%	29%	23%
PERCENT PERFORMED:	38%	31%	31%	28%	43%	38%	14%
<u>PERCENT COMPLETING REPROGRAPHICS COURSE AT FT BELVOIR:</u>							
PERCENT OF FEMALE MEMBERS:	6%	5%	13%	16%	10%	8%	0%
PERCENT ROTATING AMONG ORGANIZATIONAL FUNCTIONS:	19%	19%	32%	19%	10%	17%	18%

TABLE 31
JOB SATISFACTION INFORMATION ACCORDING TO MAJOR COMMAND
(PERCENT MEMBERS RESPONDING)

	<u>SAC</u>	<u>TAC</u>	<u>MAC</u>	<u>ATC</u>	<u>USAFE</u>	<u>PACAF</u>	<u>AFSC</u>
<u>I FIND MY JOB:</u>							
DULL	14	12	16	9	10	21	9
SO-SO	26	23	13	16	21	17	18
INTERESTING	59	65	71	73	62	62	73
<u>MY JOB UTILIZES MY TALENTS:</u>							
NOT AT ALL TO VERY LITTLE	22	27	25	19	30	21	23
FAIRLY WELL OR BETTER	76	73	74	78	66	79	77
<u>MY JOB UTILIZES MY TRAINING:</u>							
NOT AT ALL TO VERY LITTLE	14	15	19	9	16	25	41
FAIRLY WELL OR BETTER	84	84	81	89	82	75	59
<u>REENLISTMENT INTENTIONS:</u>							
PLAN TO RETIRE	15	11	12	11	13	8	0
PLAN NOT TO REENLIST	30	34	35	20	25	33	46
PLAN TO REENLIST	54	54	53	66	61	58	50

NOTE: COLUMNS MAY NOT ADD UP TO 100 PERCENT DUE TO "NO RESPONSE"

TABLE 32
NUMBER OF MEMBERS OF EACH MAJOR COMMAND WITHIN EACH JOB GROUP

	SAC (N=135)	TAC (N=74)	MAC (N=68)	ATC (N=64)	USAFFE (N=61)	PACAF (N=24)	AFSC (N=22)
SUPERVISORS							
LINE AND HALFTONE, AND LAYOUT AND STRIPPING PERSONNEL	18	7	11	10	9	8	4
OFFSET DUPLICATOR AND PRINTING PRESS PERSONNEL	11	7	1	4	0	0	2
OFFSET DUPLICATOR PERSONNEL	7	10	9	5	6	0	2
OFFSET DUPLICATOR, BINDERY, AND ELECTROSTATIC MASTER PERSONNEL	23	11	12	19	11	6	3
OFFSET DUPLICATOR TECHNICIAN-SUPERVISOR PERSONNEL	10	4	5	3	7	2	1
PRINTING PRESS, OFFSET DUPLICATOR, AND BINDERY PERSONNEL	12	8	8	3	13	2	2
PRINTING PRESS AND BINDERY TRAINERS	19	12	3	3	7	0	0
PRINTING PRESS PERSONNEL	4	1	0	0	2	0	0
BINDERY PERSONNEL	3	4	1	3	1	0	0
PRODUCTION CONTROL PERSONNEL	7	2	1	6	1	1	1
MICROGRAPHICS PERSONNEL	2	0	1	3	1	0	0
OTHER	3	1	4	0	0	4	3
	16	7	12	5	3	5	3

REPROGRAPHICS COURSE GRADUATES

Thirty-eight of the respondents in the survey reported having completed the Reprographics course offered at Ft Belvoir, Virginia. Since the technical school is a recent addition to the career field (established December 1979), the information provided by these graduates could provide useful early feedback for the school.

As displayed in Table 33, the graduates are a fairly heterogeneous group, with no extensive core of tasks performed by all members. This indicates that the course graduates are performing the spectrum of technical jobs in the career ladder rather than specializing in a certain area. This is further verified in the career ladder structure, where course graduates were found in most of the job groups.

Table 34 gives background and job satisfaction data for this group. Printing and duplicating were the most common functional areas reported by graduates. Fifty-three percent of the group indicated that they rotated among the various organizational functions. Probably the most surprising finding is the low reenlistment intentions of these personnel; only 40 percent of the group plan to reenlist. Since the average time in service for this group is only 49 months, many of these respondents are first enlistment personnel. This could explain the low reenlistment intentions-which are typical of first enlistment personnel. Job satisfaction, however, was not low, with 71 percent of the group finding their job interesting.

Overall, graduates from the recently established Reprographics course at Ft Belvoir who responded to this survey perform a variety of jobs covering the spectrum of reprographics duties. Printing and duplicating seem to be the main functional areas for these incumbents. The graduates report high job satisfaction, but indicate reenlistment intentions typical for most first enlistment personnel in the Air Force.

TABLE 33
REPRESENTATIVE DUTIES AND TASKS FOR REPROGRAPHICS COURSE GRADUATES

<u>DUTY</u>	<u>TITLE</u>	<u>RELATIVE PERCENT TIME SPENT</u>
H	OPERATING AND MAINTAINING OFFSET DUPLICATORS	43
I	PERFORMING BINDERY FUNCTIONS	16
J	PERFORMING PRINTING PRESS FUNCTIONS	13
G	PERFORMING ELECTROSTATIC MASTER FUNCTIONS	7
B	DIRECTING AND IMPLEMENTING	3
N	PERFORMING MICROGRAPHIC FUNCTIONS	3

REPRESENTATIVE TASKS

<u>TASKS</u>	<u>PERCENT MEMBERS PERFORMING</u>
H189 ADJUST IMAGE ON OFFSET DUPLICATORS (OD)	76
H197 ADJUST OD PILE HEIGHT CONTROLS	76
H229 SET OD COUNTERS	71
H190 ADJUST OD FEEDING UNIT BLOWERS	71
H195 ADJUST OD INK FLOW	68
H206 MOISTEN DUPLICATING DAMPENING ROLLERS	68
H208 MOUNT OD MASTERS ON MASTER CYLINDERS	68
H228 RUN MASTERS THROUGH MASTER CONVERTERS	66
H205 MIX OD FOUNTAIN SOLUTIONS	66
H226 REPLENISH OD INK FOUNTAINS	66
H207 MOUNT OD BLANKETS ON BLANKET CYLINDERS	66
H231 SET OD RECEIVING TRAY JOGGERS	63
H198 ADJUST OD ROLLERS	63
H204 LUBRICATE ODs	61

TABLE 34

BACKGROUND AND JOB SATISFACTION INFORMATION FOR
REPROGRAPHICS COURSE GRADUATES

NUMBER IN GROUP:	38
PERCENT OF SAMPLE:	7%
PERCENT LOCATED OVERSEAS:	24%
AVERAGE GRADE:	E-3
PERCENT FEMALE MEMBERS:	40%
PERCENT SUPERVISING OTHERS:	13%
AVERAGE TIME IN SERVICE (TAFMS IN MONTHS):	49
FUNCTIONAL AREA MAJORITY OF TIME SPENT:	
PRINTING	42%
DUPLICATING	40%
PHOTOLITHOGRAPHY	5%
BINDING	8%
MICROGRAPHICS	3%
PERCENT ROTATING AMONG ORGANIZATIONAL FUNCTIONS:	53%
COMMON JOB TITLES:	
DUPLICATOR OPERATOR	50%
PRESS OPERATOR	66%
AVERAGE NUMBER OF TASKS PERFORMED:	58
AVERAGE TASK DIFFICULTY PER UNIT TIME SPENT (ATDPUTS):	4.3
JOB DIFFICULTY INDEX (JDI):	9.6
PERCENT FINDING JOB INTERESTING:	71%
PERCENT PERCEIVING GOOD UTILIZATION OF TALENTS:	74%
PERCENT PERCEIVING GOOD UTILIZATION OF TRAINING:	79%
PERCENT PLANNING TO REENLIST:	40%

COMPARISON TO PREVIOUS SURVEY

A comparison of the career ladder structures of the previous report with the present report reveal many similarities. The previous report was a combined report of the previous 711X0 Duplicating, 713X0 Printing-Binding, and 713X1 Photolithography career fields, dated 30 April 1975 (AFPT 90-711-713-158). The present career ladder structure has some of the same job groups as the previous structure, concentrating in the areas of printing, binding, duplicating, and photolithography. However, the present career ladder structure also has certain job groups which combine the various jobs -indicating fusion of formerly independent reprographics functions into single jobs.

Table 35 below shows the corresponding job types between the two reports.

TABLE 35

<u>1975 JOB GROUPS</u>	<u>1981 JOB GROUPS</u>
PRINTING-DUPLICATING CLUSTER	OFFSET DUPLICATOR AND PRINTING PRESS CLUSTER
DUPLICATING CLUSTER	OFFSET DUPLICATOR PERSONNEL CLUSTER
BINDERY SPECIALIST IJT	BINDERY PERSONNEL CLUSTER
SUPERVISION CLUSTER	SUPERVISORS CLUSTER
PHOTOLITHOGRAPHY CLUSTER	LINE AND HALFTONE, AND LAYOUT AND STRIPPING PERSONNEL CLUSTER

Although these jobs do not directly correspond to one another, in general the major emphasis of these groups are in the same areas.

Some of the unique job groups in the 1981 report which illustrate the combination of these functions are the Offset Duplicator, Bindery, and Electrostatic Master Personnel independent job type (IJT), and the Printing Press, Offset Duplicator, and Bindery Personnel IJT. Other groups identified in the present report which were not in the 1975 report were the Micrographics personnel IJT and the Production Controllers IJT.

Most other sections of the previous 1975 report did not directly correspond to the 703X0 report, since the previous report was broken down into component functions. Consequently the major area of comparison was the career ladder structure. Generally, the present report has a few more job groups which perform a combination of the various reprographics functions or perform newly identified responsibilities.

ANALYSIS OF WRITE-IN COMMENTS

Job inventories include a section for any comments respondents may have concerning the career field. An analysis of these comments is sometimes helpful in finding areas of discontent in the field. Many times, incumbents in the field also have constructive suggestions which they feel would improve their career ladder.

Generally, there were not a lot of common comments on the 703X0 inventory. The few similar comments indicated dissatisfaction with the integration of the three previous AFSCs. Some members report having to train incoming airmen in reprographics areas in which they themselves have no experience. A few respondents also indicated a limited job with little rotation among the various reprographics functions. Consequently, comments indicate that all personnel are not yet totally integrated into the broadened Reprographics job. The most widely received comment concerned the need for a mandatory category A technical school. Some people in the field feel that the direct duty assignment is inadequate for the job required of these individuals. Mandatory training would enable new Reprographics personnel to gain training in all aspects of the job prior to their first assignment.

Some examples of write-in comments are:

"I feel that since the printing fields have been merged within the Air Force, there is a great need for formal training (i.e., tech school) other than just OJT and CDC courses."

"Personnel assigned to this career field should be trained through a tech school versus direct duty assignments."

"I spent all my time in micrographics before, until I applied enough pressure to get moved."

Overall, the comments supplied indicate that some respondents have problems with the fusion of the three previously separate jobs of printing-binding, duplicating, and photolithography. However, these problems could be expected as part of the transition from three previously separate specialties into one career field. Respondents indicate that in their opinion the best way to alleviate this problem would be to send trainees through the Reprographics course in order for them to be trained properly in all aspects of the reprographics job. These individuals would then be prepared to perform any reprographics function needed and they would not have to rely on training by personnel who may have never worked with the equipment before.

IMPLICATIONS

The 703X0 Reprographics career ladder is somewhat heterogeneous, with jobs differing on the basis of the reprographics functions performed. These functions are duplicating, printing, binding, photolithography, and micrographics. Typically, individuals reported performing a job concentrating in one or more of these areas. There was no reliable breakout of job groups according to the previous AFSC held by the individuals.

The micrographics function tended to be the most specialized, with only one group performing it to a significant degree. This group concentrated on the micrographics function to the exclusion of the other reprographics duties. Considering that the micrographics function is a recent introduction into the career field, combined with the fact that all members of this highly specialized group had either 3- or 5-skill levels, this is not surprising. Most likely, the more recent incumbents into the field were trained in this area and perform it exclusively due to the fact that personnel who were already in the field when the micrographics function was introduced have no training in the area. Consequently, it is expected that the micrographics function will probably fuse more completely with the other reprographics functions with time.

Graduates from the Reprographics course at Ft Belvoir, VA seem to be performing a wide range of the reprographics jobs, as indicated by the fact that the members did not group together based on task performance. The operation and maintenance of offset duplicators consumed the greatest amount of their time; however, there were only 25 common tasks performed by over 50 percent of the graduates. This indicates the heterogeneous nature of the group. Over 70 percent of the graduates found their job interesting and their talents and training well utilized; however, only 40 percent of the group indicate reenlistment intentions. One possible reason for this could be the fact that many members are in their first enlistment.

APPENDIX A

TABLE A1
 SUPERVISORS CLUSTER (GRP021)
 (N=75)
 RELATIVE PERCENT TIME SPENT ON DUTIES

<u>DUTY</u>	<u>TITLE</u>	<u>RELATIVE PERCENT TIME SPENT</u>
B	DIRECTING AND IMPLEMENTING	24
A	ORGANIZING AND PLANNING	19
C	EVALUATING AND INSPECTING	18
F	PERFORMING COPY MANAGEMENT FUNCTIONS	12
E	PERFORMING ADMINISTRATIVE AND SUPPLY FUNCTIONS	12
D	TRAINING	8

REPRESENTATIVE TASKS

<u>TASK</u>	<u>PERCENT MEMBERS PERFORMING</u>
A5 DETERMINE WORK PRIORITIES	83
A11 ESTABLISH ORGANIZATIONAL POLICIES, OFFICE INSTRUCTIONS, OR STANDARD OPERATING PROCEDURES	81
B60 WRITE CORRESPONDENCE	80
B50 REVIEW PRINTING REQUESTS	80
A4 DETERMINE REQUIREMENTS FOR SPACE, EQUIPMENT, PERSONNEL, OR SUPPLIES	79
A3 CALCULATE VALUE OF EQUIPMENT	79
B33 DETERMINE MOST ECONOMICAL METHODS OF REPRODUCTION	77
C75 EVALUATE EQUIPMENT BEFORE PURCHASE OR RENTAL	77
B32 COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED PROBLEMS	77
A8 DEVELOP WORK METHODS OR PROCEDURES	76
A12 ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	76
C90 PREPARE APRs	76
C62 ANALYZE WORKLOAD REQUIREMENTS	72
A27 SCHEDULE LEAVES OR PASSES	72
B44 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	71
A1 ASSIGN PERSONNEL TO DUTY POSITIONS	71
A14 ESTABLISH PRODUCTION CONTROLS	68
A7 DEVELOP STANDARDS FOR PRINTED MATERIALS	68
F151 ADVISE USERS ON COPYING PROCEDURES	67
B49 PREPARE REQUISITONS FOR SUPPLIES OR EQUIPMENT	67
C61 ACCOUNT FOR MATERIALS EXPENDED	65
E132 MAINTAIN LISTS OF EQUIPMENT	65

TABLE A2

LINE AND HALFTONE, AND LAYOUT AND STRIPPING PERSONNEL CLUSTER (GRP052)
(N=28)

RELATIVE PERCENT TIME SPENT ON DUTIES

DUTY	TITLE	RELATIVE PERCENT TIME SPENT
K	PREPARING LINE OR HALFTONE NEGATIVES AND POSITIVES	39
L	PERFORMING LAYOUT AND STRIPPING FUNCTIONS	19
I	PERFORMING BINDERY FUNCTIONS	8
M	PERFORMING PLATEROOM FUNCTIONS	7
H	OPERATING AND MAINTAINING OFFSET DUPLICATORS	6
G	PERFORMING ELECTROSTATIC MASTER FUNCTIONS	4
C	EVALUATING AND INSPECTING	4
B	DIRECTING AND IMPLEMENTING	3

REPRESENTATIVE TASKS

TASK	PERCENT MEMBERS PERFORMING
K401 SET CAMERA EXPOSURE TIMES	96
K353 ADJUST CAMERA LIGHTS	96
K354 ADJUST COPYBOARDS	93
K355 ADJUST LENSBOARD	93
K376 FLASH FILM FOR SHADOW DOTS	93
K400 SET CAMERA APERTURES	89
K372 DETERMINE JOB SPECIFICATIONS FOR PREPARING NEGATIVES OR POSITIVES	89
K384 PREPARE DEVELOPERS OR FIXERS	89
K364 CLEAN COPYBOARD GLASS	89
K371 CUT FILM TO SIZE	89
L411 INSPECT NEGATIVES	86
K369 COMPUTE COPYBOARD SETTINGS	86
K370 COMPUTE LENS SETTINGS	86
L406 CLEAN GLASS ON LIGHT TABLES	86
M428 CLEAN GLASS ON PLATEMAKERS	86
L413 OPAQUE OR MASK UNWANTED AREAS OF NEGATIVES OR POSITIVES	82
L404 ASSEMBLE FLATS	82
L414 POSITION AND TAPE NEGATIVES ON LAYOUT SHEETS	82
L426 TRIM NEGATIVES	82
K359 CENTER IMAGES ON GROUND GLASS	82
K362 CLEAN CAMERA EXTERIORS	82
L409 CORRECT IMPERFECTIONS IN NEGATIVES	79

TABLE A3
OFFSET DUPLICATOR AND PRINTING PRESS PERSONNEL CLUSTER (GRP096)
(N=43)

RELATIVE PERCENT TIME SPENT ON DUTIES

<u>DUTY</u>	<u>TITLE</u>	<u>RELATIVE PERCENT TIME SPENT</u>
H	OPERATING AND MAINTAINING OFFSET DUPLICATORS	36
J	PERFORMING PRINTING PRESS FUNCTIONS	33
I	PERFORMING BINDERY FUNCTIONS	14
G	PERFORMING ELECTROSTATIC MASTER FUNCTIONS	9
B	DIRECTING AND IMPLEMENTING	1

REPRESENTATIVE TASKS

<u>TASK</u>	<u>PERCENT MEMBERS PERFORMING</u>
H208 MOUNT OD MASTERS ON MASTER CYLINDERS	100
H195 ADJUST OD INK FLOW	100
H205 MIX OD FOUNTAIN SOLUTIONS	98
H206 MOISTEN DUPLICATING DAMPENING ROLLERS	95
H212 REMOVE OD MASTERS AND CLEAN BLANKETS	95
H226 REPLENISH OD INK FOUNTAINS	93
H189 ADJUST IMAGE ON OFFSET DUPLICATORS (OD)	93
H207 MOUNT OD BLANKETS ON BLANKET CYLINDERS	93
H229 SET OD COUNTERS	91
H228 RUN MASTERS THROUGH MASTER CONVERTERS	91
H197 ADJUST OD PILE HEIGHT CONTROLS	91
H190 ADJUST OD FEEDING UNIT BLOWERS	91
J311 CLEAN PP IMPRESSION CYLINDERS	88
J305 ADJUST PP VACUUM OR AIR FLOW	88
H203 LOAD OD FEEDER SYSTEMS	84
J310 CLEAN PP EXTERIORS	84
J340 REPLENISH PP INK FOUNTAINS	81
H201 CLEAN OD FEEDER ROLLERS	81
H230 SET OD MULTISHEET DETECTORS	79
H191 ADJUST OD GUIDES OR CYLINDERS	79
J348 SET PP COUNTERS	77
H227 REPLENISH ODs WITH FOUNTAIN SOLUTIONS OTHER THAN INK	77
I262 OPERATE CUTTERS	77
I261 OPERATE COLLATORS	77
J309 ATTACH PP PLATES TO PLATE CYLINDERS	77

TABLE A4

OFFSET DUPLICATOR PERSONNEL CLUSTER (GRP106)
(N=99)

RELATIVE PERCENT TIME SPENT ON DUTIES

<u>DUTY</u>	<u>TITLE</u>	<u>RELATIVE PERCENT TIME SPENT</u>
H	OPERATING AND MAINTAINING OFFSET DUPLICATORS	65
I	PERFORMING BINDERY FUNCTIONS	15
G	PERFORMING ELECTROSTATIC MASTER FUNCTIONS	13
E	PERFORMING ADMINISTRATIVE AND SUPPLY FUNCTIONS	2

REPRESENTATIVE TASKS

<u>TASK</u>	<u>PERCENT MEMBERS PERFORMING</u>
H195 ADJUST OD INK FLOW	100
H289 ADJUST IMAGE ON OFFSET DUPLICATORS (OD)	98
H229 SET OD COUNTERS	97
H226 REPLENISH OD INK FOUNTAINS	97
H228 RUN MASTERS THROUGH MASTER CONVERTERS	96
H208 MOUNT OD MASTERS ON MASTER CYLINDERS	95
H212 REMOVE OD MASTERS AND CLEAN BLANKETS	94
H205 MIX OD FOUNTAIN SOLUTIONS	94
H207 MOUNT OD BLANKETS ON BLANKET CYLINDERS	93
H190 ADJUST OD FEEDING UNIT BLOWERS	92
H206 MOISTEN DUPLICATING DAMPENING ROLLERS	90
H203 LOAD OD FEEDER SYSTEMS	89
H227 REPLENISH ODs WITH FOUNTAIN SOLUTIONS OTHER THAN INK	87
H230 SET OD MULTISHEET DETECTORS	85
H201 CLEAN OD FEEDER ROLLERS	84
H198 ADJUST OD ROLLERS	81
H214 REMOVE OR REPLACE OD DAMPENER COVERS	80
H202 CLEAN ODs OTHER THAN AIR FILTERS OR FEEDER ROLLERS	78
H204 LUBRICATE ODs	76
H196 ADJUST OD PAPER BUCKLES	76

TABLE A5

OFFSET DUPLICATOR, BINDERY, AND ELECTROSTATIC MASTER PERSONNEL
INDEPENDENT JOB TYPE (GRP105)
(N=39)

RELATIVE PERCENT TIME SPENT ON DUTIES

DUTY	TITLE	RELATIVE PERCENT TIME SPENT
H	OPERATING AND MAINTAINING OFFSET DUPLICATORS	33
I	PERFORMING BINDERY FUNCTIONS	21
G	PERFORMING ELECTROSTATIC MASTER FUNCTIONS	15
F	PERFORMING COPY MANAGEMENT FUNCTIONS	7
B	DIRECTING AND IMPLEMENTING	6
S	PERFORMING ADMINISTRATIVE AND SUPPLY FUNCTIONS	5
A	ORGANIZING AND PLANNING	4

REPRESENTATIVE TASKS

TASKS	PERCENT MEMBERS PERFORMING
H228 RUN MASTERS THROUGH MASTER CONVERTERS	97
H208 MOUNT OD MASTERS ON MASTER CYLINDERS	97
H205 MIX OD FOUNTAIN SOLUTIONS	97
H206 MOISTEN DUPLICATING DAMPENING ROLLERS	97
H197 ADJUST OD PILE HEIGHT CONTROLS	97
H191 ADJUST OD GUIDES OR CYLINDERS	97
H199 ADJUST PRESSURE BETWEEN MASTER CYLINDERS AND BLANKET CYLINDERS	97
I261 OPERATE COLLATORS	95
H229 SET OD COUNTERS	95
G170 ADJUST EMI EXPOSURE TIME	95
H189 ADJUST IMAGE ON OFFSET DUPLICATORS (OD)	95
H195 ADJUST OD INK FLOW	95
H207 MOUNT OD BLANKETS ON BLANKET CYLINDERS	95
H190 ADJUST OD FEEDING UNIT BLOWERS	95
I263 OPERATE DRILLS	92
I245 COLLATE PAPER BY HAND	92
I262 OPERATE CUTTERS	90
I284 STAPLE PAPER	90
G176 ADJUST POSITION OF IMAGES ON ELECTROSTATIC MASTERS	90
G179 CLEAN EMI GLASS, COPY BOARDS, MIRRORS, OR LENSES	90
G180 COMPUTE AMOUNT OF ENLARGEMENT OR REDUCTION OF IMAGES	87
G182 MAKE CORRECTIONS ON ELECTROSTATIC MASTERS	85

TABLE A6
OFFSET DUPLICATOR TECHNICIAN-SUPERVISOR PERSONNEL CLUSTER (GRP101)
(N=55)

RELATIVE PERCENT TIME SPENT ON DUTIES

<u>DUTY</u>	<u>TITLE</u>	<u>RELATIVE PERCENT TIME SPENT</u>
H	OPERATING AND MAINTAINING OFFSET DUPLICATORS	17
B	DIRECTING AND IMPLEMENTING	16
I	PERFORMING BINDERY FUNCTIONS	12
C	EVALUATING AND INSPECTING	12
A	ORGANIZING AND PLANNING	12
G	PERFORMING ELECTROSTATIC MASTER FUNCTIONS	9
E	PERFORMING ADMINISTRATIVE AND SUPPLY FUNCTIONS	9
F	PERFORMING COPY MANAGEMENT FUNCTIONS	6
D	TRAINING	4

REPRESENTATIVE TASKS

<u>TASK</u>	<u>PERCENT MEMBERS PERFORMING</u>
A5 DETERMINE WORK PRIORITIES	95
B33 DETERMINE MOST ECONOMICAL METHODS OF REPRODUCTION	95
B50 REVIEW PRINTING REQUESTS	93
E133 MAINTAIN LOGS OF JOBS PROCESSED	93
G170 ADJUST EMI EXPOSURE TIME	93
G180 COMPUTE AMOUNT OF ENLARGEMENT OR REDUCTION OF IMAGES	93
B35 DIRECT EQUIPMENT MAINTENANCE	91
G176 ADJUST POSITION OF IMAGES ON ELECTROSTATIC MASTERS	91
H195 ADJUST OD INK FLOW	91
G179 CLEAN EMI GLASS, COPYBOARDS, MIRRORS, OR LENSES	91
I261 OPERATE COLLATORS	89
B51 SCHEDULE EQUIPMENT MAINTENANCE	89
G168 ADJUST ELECTROSTATIC MASTER IMAGER (EMI) APERTURES	89
H189 ADJUST IMAGE ON OFFSET DUPLICATORS (OD)	89
H205 MIX OD FOUNTAIN SOLUTIONS	89
H208 MOUNT OD MASTERS ON MASTER CYLINDERS	89
H197 ADJUST OD PILE HEIGHT CONTROLS	89
H204 LUBRICATE ODs	89
G175 ADJUST EMI TONER FEED	89
H230 SET OD MULTISHEET DETECTORS	89
B52 SCHEDULE WORK ASSIGNMENTS	87
A8 DEVELOP WORK METHODS OR PROCEDURES	87

TABLE A7

PRINTING PRESS, OFFSET DUPLICATOR, AND BINDERY PERSONNEL
 INDEPENDENT JOB TYPE (GRP114)
 (N=55)

RELATIVE PERCENT TIME SPENT ON DUTIES

DUTY	TITLE	RELATIVE PERCENT TIME SPENT
J	PERFORMING PRINTING PRESS FUNCTIONS	27
H	OPERATING AND MAINTAINING OFFSET DUPLICATORS	22
I	PERFORMING BINDERY FUNCTIONS	15
G	PERFORMING ELECTROSTATIC MASTER FUNCTIONS	9
B	DIRECTING AND IMPLEMENTING	5
C	EVALUATING AND INSPECTING	4
A	ORGANIZING AND PLANNING	4

REPRESENTATIVE TASKS

TASK	PERCENT MEMBERS PERFORMING
I284 STAPLE PAPER	98
H189 ADJUST IMAGE ON OFFSET DUPLICATORS (OD)	98
J311 CLEAN PP IMPRESSION CYLINDERS	98
H190 ADJUST OD FEEDING UNIT BLOWERS	98
J305 ADJUST PP VACUUM OR AIR FLOW	98
H197 ADJUST OD PILE HEIGHT CONTROLS	98
J348 SET PP COUNTERS	96
H229 SET OD COUNTERS	96
H191 ADJUST OD GUIDES OR CYLINDERS	96
G170 ADJUST EMI EXPOSURE TIME	96
H207 MOUNT OD BLANKETS ON BLANKET CYLINDERS	96
H205 MIX OD FOUNTAIN SOLUTIONS	95
H208 MOUNT OD MASTERS ON MASTER CYLINDERS	95
J342 REPLENISH PP WATER FOUNTAINS	95
H195 ADJUST OD INK FLOW	95
G176 ADJUST POSITION OF IMAGES ON ELECTROSTATIC MASTERS	95
J349 SET PP INK OR WATER CONTROLS	95
H204 LUBRICATE ODs	95
H198 ADJUST OD ROLLERS	95
J319 INSPECT PRINTING PRESSES FOR WORN OR MALFUNCTIONING PARTS	95
J307 ADJUST PP WATER ROLLERS	95
H231 SET OD RECEIVING TRAY JOGTERS	95
J299 ADJUST PP INK ROLLERS	95

TABLE A8
PRINTING PRESS AND BINDERY TRAINERS INDEPENDENT JOB TYPE (GRP077)
(N=7)

RELATIVE PERCENT TIME SPENT ON DUTIES

DUTY	TITLE	RELATIVE PERCENT TIME SPENT
J	PERFORMING PRINTING PRESS FUNCTIONS	16
I	PERFORMING BINDERY FUNCTIONS	14
D	TRAINING	11
H	OPERATING AND MAINTAINING OFFSET DUPLICATORS	9
C	EVALUATING AND INSPECTING	8
B	DIRECTING AND IMPLEMENTING	7
A	ORGANIZING AND PLANNING	6
E	PERFORMING ADMINISTRATIVE AND SUPPLY FUNCTIONS	5
K	PREPARING LINE OR HALFTONE NEGATIVES OR POSITIVES	5

REPRESENTATIVE TASKS

TASK	PERCENT MEMBERS PERFORMING
B58 SUPERVISE REPROGRAPHIC TECHNICIANS (AFSC 70370)	100
D124 DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION	100
C93 WRITE STAFF STUDIES, SURVEYS, OR SPECIAL REPORTS	100
D116 MAINTAIN STUDY REFERENCE FILES	100
D112 ESTABLISH UNIT TRAINING STANDARDS	100
D113 EVALUATE OJT TRAINEES	100
I246 COLLATE PAPER USING ROTATING TABLES	100
I277 PUNCH HOLES IN PAPER USING MANUAL PUNCHERS	100
D125 WRITE JUSTIFICATIONS FOR TRAINING FACILITIES, EQUIPMENT, PUBLICATIONS, OR MATERIALS	100
I274 PACK PRINTED MATERIALS MANUALLY	100
D106 DEVELOP LESSON PLANS	100
D115 EVALUATE TRAINING METHODS, TECHNIQUES, OR PROGRAMS	100
C85 EVALUATE WORK REQUESTS FOR COMPLIANCE WITH PUBLIC LAW	100
E141 MAKE ENTRIES ON CONSOI. DUPL. CTR. AND FACS. REPORT OF JOBS PROD. WHICH EXCEED JCP DUPL. LIMIT. FORMS (AF FORM 337)	100
E143 MAKE ENTRIES ON CUSTODIAN REQUEST/RECEIPT FORMS (AF FORM 601B)	100
H220 REMOVE OR REPLACE OD MULTISHEET DETECTORS	100
H223 REMOVE OR REPLACE OD SOLENOIDS	100
I243 BREAK DOWN BACK GAUGES ON CUTTER	100
B43 INITIATE PERSONNEL ACTION REQUESTS	100

TABLE A9
 PRINTING PRESS PERSONNEL CLUSTER (GRP044)
 (N=13)
 RELATIVE PERCENT TIME SPENT ON DUTIES

<u>DUTY</u>	<u>TITLE</u>	<u>RELATIVE PERCENT TIME SPENT</u>
J	PERFORMING PRINTING PRESS FUNCTIONS	60
I	PERFORMING BINDERY FUNCTIONS	16
H	OPERATING AND MAINTAINING OFFSET DUPLICATORS	11
G	PERFORMING ELECTROSTATIC MASTER FUNCTIONS	5

REPRESENTATIVE TASKS

<u>TASK</u>	<u>PERCENT MEMBERS PERFORMING</u>
J310 CLEAN PP EXTERIORS	100
J305 ADJUST PP VACUUM OR AIR FLOW	100
J320 LOAD PP FEEDER SYSTEMS	92
J301 ADJUST PP PILE HEIGHT INDICATORS	92
J298 ADJUST PP IMPRESSION CYLINDER PRESSURE	92
J307 ADJUST PP WATER ROLLERS	92
J306 ADJUST PP WATER FOUNTAIN STOPS	92
J311 CLEAN PP IMPRESSION CYLINDERS	85
J309 ATTACH PP PLATES TO PLATE CYLINDERS	85
J329 PREPARE PP PLATES FOR MOUNTING	85
I299 ADJUST PP INK ROLLERS	85
J337 REMOVE OR REPLACE PP WATER ROLLERS	85
J334 REMOVE OR REPLACE PP INK OR WATER ROLLERS	85
J348 SET PP COUNTERS	77
J316 COVER PP DAMPENING ROLLERS	77
J303 ADJUST PP REGISTRATION POSITION	77
J304 ADJUST PP SEPARATOR FINGERS	77
J296 ADJUST PP GRIPPER FINGERS	77
J328 PREPARE PP BLANKETS FOR MOUNTING	77
I340 REPLENISH PP INK FOUNTAINS	69
I284 STAPLE PAPER	69

TABLE A10
 BINDERY PERSONNEL CLUSTER (GRP016) •
 (N=23)
 RELATIVE PERCENT TIME SPENT ON DUTIES

DUTY	TITLE	RELATIVE PERCENT TIME SPENT
I	PERFORMING BINDERY FUNCTIONS	76
B	DIRECTING AND IMPLEMENTING	6
A	ORGANIZING AND PLANNING	5
H	OPERATING AND MAINTAINING OFFSET DUPLICATORS	5

TASK	PERCENT MEMBERS PERFORMING
I263 OPERATE DRILLS	87
I262 OPERATE CUTTERS	87
I250 INSPECT SEQUENCING OF PAGES	83
I271 OPERATE STITCHERS	83
I245 COLLATE PAPER BY HAND	83
I261 OPERATE COLLATORS	78
I284 STAPLE PAPER	74
I244 CLEAN BINDERY EQUIPMENT	70
I285 TRIM PAPER	65
I251 INSTALL DRILL BITS OR SPINDLES	65
I248 HAND MARRY SETS	61
I242 ADJUST STITCHERS	61
I236 ADJUST DRILLS	52
I255 LUBRICATE DRILLS	48
I280 REMOVE OR REPLACE CUTTING STICKS	48
I274 PACK PRINTED MATERIALS MANUALLY	43
I254 LUBRICATE CUTTERS	43
I249 INSPECT CUTTERS FOR ACCURACY	43
I282 SELECT WIRE AND LOAD SPOOLS	43
I253 LABEL, ADDRESS, OR MAIL MATERIALS	39

TABLE A11

PRODUCTION CONTROL PERSONNEL INDEPENDENT JOB TYPE (GRP071)
(N=7)

RELATIVE PERCENT TIME SPENT ON DUTIES

<u>DUTY</u>	<u>TITLE</u>	<u>RELATIVE PERCENT TIME SPENT</u>
E	PERFORMING ADMINISTRATIVE AND SUPPLY FUNCTIONS	31
B	DIRECTING AND IMPLEMENTING	30
A	ORGANIZING AND PLANNING	25
C	EVALUATING AND INSPECTING	10

REPRESENTATIVE TASKS

<u>TASK</u>	<u>PERCENT MEMBERS PERFORMING</u>
B50 REVIEW PRINTING REQUESTS	100
A5 DETERMINE WORK PRIORITIES	86
E133 MAINTAIN LOGS OF JOBS PROCESSED	86
E128 COLLECT ITEMS TO BE DUPLICATED OR PRINTED	57
E134 MAINTAIN REPORTABLE JOB LOGS	57
C85 EVALUATE WORK REQUESTS FOR COMPLIANCE WITH PUBLIC LAW	57
A14 ESTABLISH PRODUCTION CONTROLS	43
C65 EDIT COMPLETED WORK FOR COMPLIANCE WITH WORK REQUESTS	43
B33 DETERMINE MOST ECONOMICAL METHODS OF REPRODUCTION	29
B60 WRITE CORRESPONDENCE	29

TABLE A12
MICROGRAPHICS PERSONNEL INDEPENDENT JOB TYPE (GRP018)
(N=13)

RELATIVE PERCENT TIME SPENT ON DUTIES

<u>DUTY</u>	<u>TITLE</u>	<u>RELATIVE PERCENT TIME SPENT</u>
N	PERFORMING MICROGRAPHIC FUNCTIONS	79
K	PREPARING LINE OR HALFTONE NEGATIVES AND POSITIVES	4
E	PERFORMING ADMINISTRATIVE AND SUPPLY FUNCTIONS	3
C	EVALUATING AND INSPECTING	3

REPRESENTATIVE TASKS

<u>TASK</u>	<u>PERCENT MEMBERS PERFORMING</u>
N457 OPERATE CAMERAS	100
N481 THREAD FILMS INTO ME	92
N448 FEED ORIGINALS THROUGH ME	85
N462 PERFORM DENSITY STEP TESTS	85
N463 PERFORM OPERATOR MAINTENANCE ON MICROGRAPHIC EQUIPMENT	77
N456 MOUNT ORIGINAL FILMS TO BE DUPLICATED	77
N483 UNLOAD DUPLICATE FILMS FROM ME	77
N451 LOAD BULK FILMS INTO ME	77
N454 MIX MICROGRAPHIC CHEMICALS	77
N458 OPERATE MICROGRAPHIC EQUIPMENT OTHER THAN CAMERAS OR DIAZO DUPLICATORS	77
N484 UNLOAD ORIGINAL FILMS (DUPLICATED) FROM ME	77
N461 PACKAGE FILMS	77
N472 SET COUNTERS	77
N447 DEVELOP EXPOSED FILM	69
N475 SET LIGHTING INTENSITY	69
N445 ADJUST MICROGRAPHIC EQUIPMENT (ME)	69
N464 PROCESS AND EXAMINE CONTROL STRIPS	62
N452 LOAD DUPLICATING FILMS INTO ME	62
N469 SELECT MICROGRAPHIC CAMERAS	62
N459 OPERATE ROLL DIAZO DUPLICATORS	54
N446 CUT FICHE	54

TABLE A13
SUPERVISORS CLUSTER
EQUIPMENT USED BY 30 PERCENT OR MORE OF MEMBERS
(PERCENT MEMBERS RESPONDING)

<u>EQUIPMENT</u>	<u>PERCENT MEMBERS USING</u>
ELECTROSTATIC COPIERS/PLATEMAKERS	40

TABLE A14

LINE AND HALFTONE, AND LAYOUT AND STRIPPING PERSONNEL CLUSTER
 EQUIPMENT USED BY 30 PERCENT OR MORE OF MEMBERS
 (PERCENT MEMBERS RESPONDING)

EQUIPMENT	PERCENT MEMBERS USING
LAYOUT TABLES	86
FLIPTOP PLATE MAKERS	79
GREY HALFTONE CONTACT SCREENS	71
SAFE LIGHTS	68
STRIPPING TABLES	68
ELECTROSTATIC COPIERS/PLATEMAKERS	64
VACUUM FRAMES	61
FILM DEVELOPING SINKS	61
MAGENTA HALFTONE CONTACT SCREENS	57
PLATE DEVELOPING SINKS	54
AUTOMATIC FILM PROCESSORS	50
CONTACT PRINTERS	46
GALLERY CAMERAS	46
RUB UP TABLES	39
FINISHING TABLES	39
LINEUP AND REGISTER TABLES	39
BINDING MACHINES	36
FLUORESCENT LAMPS	36
WET PROCESS PLATEMAKERS	36
ELECTRIC STAPLERS	32
MANUAL PAPER CUTTERS	32
PLATEMAKING CAMERAS	32

TABLE A15

OFFSET DUPLICATOR AND PRINTING PRESS PERSONNEL
EQUIPMENT USED BY 30 PERCENT OR MORE OF MEMBERS
(PERCENT MEMBERS RESPONDING)

EQUIPMENT	PERCENT MEMBERS USING
ELECTROSTATIC COPIER/PLATEMAKERS	74
ELECTRIC STAPLERS	58
SINGLE HEAD DRILLS	56
MANUAL PAPERCUTTERS	51
STATION COLLATORS	49
PLATEMAKING CAMERAS	47
COLLATING CABINETS	44
PUNCHING MACHINES	42
BINDING MACHINES	40
SADDLE STITCHERS	35
MULTIPLE HEAD DRILLS	33

TABLE A16

OFFSET DUPLICATOR PERSONNEL
EQUIPMENT USED BY 30 PERCENT OR MORE OF MEMBERS
(PERCENT MEMBERS RESPONDING)

EQUIPMENT	PERCENT MEMBERS USING
ELECTROSTATIC COPIERS/PLATEMAKERS	78%
PAPER CUTTERS	57%
ELECTRIC STAPLERS	47%
BINDING MACHINES	42%
SINGLE HEAD DRILLS	37%
PADDING RACKS	31%
PLATEMAKING CAMERAS	30%

TABLE A17

OFFSET DUPLICATOR, BINDERY, AND ELECTROSTATIC MASTER PERSONNEL
EQUIPMENT USED BY 30 PERCENT OR MORE OF MEMBERS
(PERCENT MEMBERS RESPONDING)

EQUIPMENT	PERCENT MEMBERS USING
ELECTROSTATIC COPIERS/PLATEMAKERS	92%
MANUAL PAPER CUTTERS	69%
SINGLE HEAD DRILLS	59%
BINDING MACHINES	56%
STATION COLLATORS	54%
ELECTRIC STAPLERS	51%
SADDLE STITCHERS	51%
PUNCHING MACHINES	49%
SIDE STITCHERS	44%
SINGLE SHEET COLLATORS	39%
PLATEMAKING CAMERAS	33%
PADDING RACKS	31%
POWERED PAPER CUTTERS	31%
COLLATING CABINETS	31%

TABLE A18

OFFSET DUPLICATOR TECHNICIAN-SUPERVISOR PERSONNEL
EQUIPMENT USED BY 30 PERCENT OR MORE OF MEMBERS
(PERCENT MEMBERS RESPONDING)

<u>EQUIPMENT</u>	<u>PERCENT MEMBERS USING</u>
ELECTROSTATIC COPIERS/PLATEMAKERS	89%
SINGLE HEAD DRILLS	78%
MANUAL PAPER CUTTERS	71%
STATION COLLATORS	51%
BINDING MACHINES	46%
ELECTRIC STAPLERS	46%
PLATEMAKING CAMERAS	44%
SADDLE STITCHERS	42%
SINGLE SHEET COLLATORS	35%
PADDING RACKS	33%
COLLATING CABINETS	33%

TABLE A19

PRINTING PRESS, OFFSET DUPLICATOR, AND BINDERY PERSONNEL
 EQUIPMENT USED BY 30 PERCENT OR MORE OF MEMBERS
 (PERCENT MEMBERS RESPONDING)

<u>EQUIPMENT</u>	<u>PERCENT MEMBERS USING</u>
ELECTROSTATIC COPIERS/PLATEMAKERS	84%
BINDING MACHINES	75%
ELECTRIC STAPLERS	73%
PLATEMAKING CAMERAS	71%
MANUAL PAPER CUTTERS	66%
SINGLE HEAD DRILLS	64%
PUNCHING MACHINES	60%
SADDLE STITCHERS	60%
STATION COLLATORS	58%
SIDE STITCHERS	53%
COLLATING CABINETS	49%
JOGGERS	47%
SINGLE SHEET COLLATORS	40%
POWERED PAPER CUTTERS	33%
PADDING RACKS	33%

TABLE A20

PRINTING PRESS AND BINDERY TRAINERS
 EQUIPMENT USED BY 30 PERCENT OR MORE OF MEMBERS
 (PERCENT MEMBERS RESPONDING)

<u>EQUIPMENT</u>	<u>PERCENT MEMBERS USING</u>
ELECTROSTATIC COPIERS/PLATEMAKERS	71%
PUNCHING MACHINES	71%
SINGLE HEAD DRILLS	71%
BINDING MACHINES	57%
PLATEMAKING CAMERAS	57%
STATION COLLATORS	57%
COLLATING CABINETS	43%
ELECTRIC STAPLERS	43%
JOGGERS	43%
MANUAL PAPER CUTTERS	43%
PADDING RACKS	43%
ROTARY COLLATING TABLES	43%
SADDLE STITCHERS	43%
SIDE STITCHERS	43%
SINGLE SHEET COLLATORS	43%
SORTERS	43%

TABLE A21

PRINTING PRESS PERSONNEL
EQUIPMENT USED BY 30 PERCENT OR MORE OF MEMBERS
(PERCENT MEMBERS RESPONDING)

<u>EQUIPMENT</u>	<u>PERCENT MEMBERS USING</u>
ELECTRIC STAPLERS	54%
MANUAL PAPER CUTTERS	46%
ELECTROSTATIC COPIERS/PLATEMAKERS	39%
PLATEMAKING CAMERAS	39%
COLLATING CABINETS	39%
SINGLE HEAD DRILLS	39%
SINGLE SHEET COLLATORS	39%
PUNCHING MACHINES	31%

TABLE A22

BINDERY PERSONNEL
 EQUIPMENT USED BY 30 PERCENT OR MORE OF MEMBERS
 (PERCENT MEMBERS RESPONDING)

<u>EQUIPMENT</u>	<u>PERCENT MEMBERS USING</u>
BINDING MACHINES	70%
ELECTRIC STAPLERS	61%
MULTIPLE HEAD DRILLS	44%
SADDLE STITCHERS	44%
STATION COLLATORS	44%
POWERED PAPER CUTTERS	39%
PUNCHING MACHINES	39%
SIDE STITCHERS	39%
SINGLE HEAD DRILLS	39%
JOGGERS	35%
MANUAL PAPER CUTTERS	35%
ELECTROSTATIC COPIERS/PLATEMAKERS	30%
COLLATING CABINETS	30%
SINGLE SHEET COLLATORS	30%

TABLE A23

PRODUCTION CONTROL PERSONNEL
EQUIPMENT USED BY 30 PERCENT OR MORE OF MEMBERS
(PERCENT MEMBERS RESPONDING)

(NO EQUIPMENT USED BY AT LEAST 30 PERCENT)

TABLE A24

MICROGRAPHICS PERSONNEL
EQUIPMENT USED BY 30 PERCENT OR MORE OF MEMBERS
(PERCENT MEMBERS RESPONDING)

<u>EQUIPMENT</u>	<u>PERCENT MEMBERS USING</u>
ROTARY MICROGRAPHIC CAMERAS	69%
AUTOMATIC FILM PROCESSORS	62%
PLANETARY MICROGRAPHIC CAMERAS	62%
STEP AND REPEAT CAMERAS	54%
COMPUTER OUTPUT MICROFORM DEVICES	46%
OZALID COPIERS	31%
TYPEWRITERS	31%

APPENDIX B

Job Type Descriptions

Listed below are brief descriptions of the job types identified in the Reprographics career ladder structure. Generally, each cluster has an area or areas of Reprographics concentration. Job types within these clusters mainly differ according to the emphasis placed upon the other various Reprographics functions. The Supervisory cluster job types differed in the areas of supervisory concentration. The Line and Halftone, and Layout and Stripping Personnel cluster emphasized the areas depicted in the title, with the job types varying in the other functions they perform. Most other clusters had job types differing for similar reasons. However, the Bindery Personnel cluster is an exception with the job types differing between the workers and the technician-supervisors. For additional information, the tables in Appendix B reveal various duty, background, and job satisfaction data for all of the job types identified. Appendix B also contains a listing of representative tasks for these job types.

I. Supervisors Cluster

Two job types were identified in this cluster: Higher Managers and Copy Managers. Brief descriptions of each job type are presented below. For further information, reference Tables B1, B3, B5, B7, and B8. Tables B9 and B10 give representative tasks for these job types respectively.

Ia. HIGHER MANAGERS (GRP058). The 50 members of this group are almost solely concerned with the high level control and direction of their organizations. Interpreting policies and determining work priorities are typical functions of this job type. Eighty-one percent of the job time of these individuals was spent in supervisory areas, 11 percent in administrative areas, and only eight percent in technical areas. Some of the common tasks performed by these individuals are:

- counsel personnel
- schedule leaves or passes
- determine most economical means of reproduction
- prepare APRs
- analyze workload requirements
- calculate value of equipment

None of these incumbents were in their first enlistment, with the group having the highest average time in service of any group, at 209 months. Eighty-six percent of this group reported supervising other personnel. On the basis of job difficulty ratings, this group had the second hardest job of any job type with a Job Difficulty Index (JDI) of 17.4 Common job titles of these members include copier manager, NCOIC duplicating center, production controller, and reproduction manager. Sixty-two percent of this group reported using no equipment in their present job.

Job satisfaction for this group was the highest of any job type, with 90 percent of the incumbents finding their job interesting, 94 percent perceiving good utilization of their talents, and 92 percent perceiving good utilization of their training. Only 66 percent of these personnel plan to reenlist, with 24 percent planning to retire.

Ib. COPY MANAGERS (GRP050). This group of 18 concentrates on supervisory duties, with 30 percent of their job time spent in the copy management area. Fourteen percent of their job time is also spent in the area of administrative functions. Members of this group performed an average of 46 tasks. Some of the typical tasks of this job type are:

- advise users on copying procedures
- establish controls for use of copiers
- maintain records of copier monitors
- conduct orientation classes for copier monitors
- maintain status boards, graphs, or charts

Fifty percent of these incumbents indicated that they supervise other personnel. All members of this group were male. These individuals averaged 159 months in service (TAFMS). Copier manager was the most common job title listed by these respondents. Sixty-one percent of this group reported using no equipment in their present job. Half of this group listed SAC as their major command.

Eighty-nine percent of the group found their job interesting and 94 percent felt their job utilized both their talents and their training. Only 66 percent indicated plans to reenlist, with 17 percent planning to retire.

II. Line and Halftone, and Layout and Stripping Personnel Cluster

The two job types identified in this cluster were the Line and Halftone, Bindery, OD, and Layout and Stripping Workers and the Line and Halftone, and Layout and Stripping Workers. Differences in these groups centered mainly in the areas of the functional emphasis of the job groups, as the job titles indicate. Brief descriptions of these groups follow, and Tables B1, B3, B5, B7, and B8 give further information, with Tables B11 and B12 providing representative tasks for the job types.

IIa. LINE AND HALFTONE, BINDERY, OD, AND LAYOUT AND STRIPPING WORKERS (GRP075). Comprised of 12 individuals, this group is centered in the functional area of photolithography mainly, with bindery and duplicating functions coming next. Twenty-four percent of their job time is spent in the area of preparing line or halftone negatives and positives. Performing an average of 142 tasks, some of the common tasks performed by these incumbents are:

- operate collators
- inspect negatives
- set camera exposure times
- determine job specifications for preparing negatives/positives
- hand marry sets
- set OD counters

Fifty-eight percent of these individuals reported a 5-skill level DAFSC. Forty-one percent of the group were in their first enlistment. Incumbents in SAC constituted 67 percent of this group. Seventy-five percent of the respondents in this group indicated rotating among the various organizational

functions. Some common job titles listed by these personnel were bindery worker, camera operator, duplicator operator, platemaker, and stripper (film assembler). With a Job Difficulty Index (JDI) of 17.0, this is one of the harder jobs in the career ladder.

Only 50 percent of this job type found their job interesting, though 75 percent felt both their talents and training were well utilized. Reenlistment intentions were low with 50 percent planning to and 50 percent planning not to reenlist.

IIb. LINE AND HALFTONE, AND LAYOUT AND STRIPPING WORKERS (GRP085). The 14 members of this group are almost exclusively concerned with photolithography functions, with 93 percent of the individuals reporting this as their main functional area. Fifty-one percent of their job time was reported as being spent preparing line and halftone negatives and positives, with an additional 27 percent of their job time being spent performing layout and stripping functions. These individuals perform an average of 67 tasks some of which are:

- flash film for shadow dots
- adjust copyboards
- adjust lensboard
- set camera exposure times
- remove or replace camera lens caps

Fourteen percent of the members of this group reported having completed the Reprographics course at Ft. Belvoir. All of these individuals were located within the CONUS. Eighty-six percent of these respondents held either a 5- or 7-skill level DAFSC. Some of the common job titles of these individuals were camera operator, platemaker, and stripper (film assembler). Automatic film processors, contact printers, developing sinks, and flip top platemakers are common equipment used by these respondents.

Seventy-nine percent of this group found their job interesting, and 93 percent felt their training was well utilized. However, 29 percent of these individuals reported plans not to reenlist (excluding retirees).

III. Offset Duplicator (OD) and Printing Press (PP) Personnel Cluster

This cluster has two job types; OD, PP, and Bindery Workers and OD and PP Workers. The main differentiating factor between these groups is the higher emphasis the first group places on bindery functions as compared to the second group. Tables B1, B3, B5, B7, and B8 provide more information about these groups. Also, Tables B13 and B14 give listings of the representative tasks performed by members of these groups respectively.

IIIa. OFFSET DUPLICATOR, PRINTING PRESS, AND BINDERY WORKERS (CRP129). Comprised of 34 individuals, the major functions of this job type are the operation and maintenance of offset duplicators, and the performance of printing press functions, with bindery functions falling behind these two. As could be expected, printing and duplicating were the functional areas most commonly reported. These individuals performed an average of 87 tasks. Some common tasks for this group are:

mix OD fountain solutions
replenish OD ink fountains
mount OD masters on master cylinders
adjust OD ink flow
moisten duplicating dampening rollers

Fifty-nine percent of this group reported a 5-skill level DAFSC, and 47 percent of the group indicated being in their first enlistment. The average time in service (TAFMS) for the group was 69 months. Typical job titles for personnel in this group include bindery worker, camera operator, duplicator operator, platemaker, and press operator. Sixty-two percent of these incumbents indicated that they rotate among the organizational functions.

Seventy-three percent of the members of this group reported an interesting job. Eighty-two percent reported at least fair utilization of their talents, and eighty-eight percent reported at least fair utilization of their training. Only 59 percent indicated intentions to reenlist, with 38 percent planning not to reenlist.

IIIb. OFFSET DUPLICATOR AND PRINTING PRESS WORKERS (GRP142). The 6 members of this job type operate and maintain offset duplicators and perform printing press functions. Forty-six percent of their job time is spent in the offset duplicator area, and forty-one percent of their time is spent on printing press functions. Individuals in this group perform an average of 52 tasks. Some common tasks include:

mount OD masters on master cylinders
replenish OD ink fountains
set OD counters
adjust image on Offset Duplicators (OD)
prepare PP plates for mounting
set PP counters

With 67 percent of these incumbents holding a 3-skill level DAFSC and members averaging only 33 months in service (TAFMS), this was one of the more junior job types identified. Eighty-three percent of these personnel were also in their first enlistment, and all members were stationed within the CONUS. Only 33 percent of these members indicated that they rotate among the various organizational functions. Sixty-seven percent reported completion of the Reprographics course at Ft. Belvoir, and 33 percent of the members of the job type were female.

Fifty percent of these personnel reported a group level of organization, and 50 percent also reported SAC as their major command. Common job titles for these personnel are duplicator operator and press operator.

Only 33 percent of this group found their job interesting, with an additional 50 percent finding it "so-so". Fifty percent also perceived poor utilization of their talents, and 50 percent plan not to reenlist even though they are not retiring. However, 83 percent felt their training was well utilized. Overall then, over half of this group found their job less than interesting, and over half of the respondents plan to separate from the Air Force. This could be a reflection of disappointment in the simplicity of their job, with a Job Difficulty Index (JDI) of only 8.5.

IV. Offset Duplicator Personnel Cluster

Two job types were identified in this cluster: Offset Duplicator (OD) Workers, and Limited Job OD Workers. Both of these groups spend most of their time on Offset Duplicator functions, but the OD Workers spend noticeable time in other areas; whereas, the Limited Job OD Workers have no other areas where they spend significant time. Tables B1, B3, B5, B7, and B8 provide more information about these groups. Representative tasks for these job types are provided in Tables B15 and B16 respectively.

IVa. OFFSET DUPLICATOR WORKERS (GRP158). The 75 individuals in this group typically operate and maintain offset duplicators, with bindery and electrostatic master functions performed to a much lesser degree. Sixty-two percent of their job time was spent in the operation and maintenance of offset duplicators and 60 percent of this group reported duplicating as their main functional area of work. Respondents in this job type performed an average of 55 tasks. Some of these common tasks were:

- adjust OD ink flow
- mount OD masters on master cylinders
- set OD counters
- run masters through master converters
- mix OD fountain solutions

Seventy-six percent of these respondents held a 5-skill level at the time of the survey and 14 percent reported that they supervise other personnel. Twenty-five percent of the group were located overseas and 63 percent of the group were in their first enlistment. Sixty-one percent of these respondents reported that they rotate among the various organizational functions. Some of the common job titles reported by these people are duplicator operator and press operator.

Sixty percent of this group found their job interesting, and 73 percent felt their talents were well utilized. Eighty-one percent also felt their training was well utilized; however, only 40 percent of these incumbents reported plans not to reenlist.

IVb. LIMITED JOB OD WORKERS (GRP173). The 19 people in this group almost exclusively operate and maintain offset duplicators. This function absorbs 84 percent of their job time. Fifty-eight percent of this group reported duplicating as the major functional area of their work. The members of this group performed an average of only 33 tasks. Some typical tasks are:

- adjust image on offset duplicators
- adjust OD ink flow
- set OD counters
- replenish OD ink fountains
- load OD feeder systems

None of these individuals reported supervising other personnel, with 68 percent of these incumbents reporting 5-skill level DAFSC. Only 21 percent indicate rotating among the various organizational functions. This was one of

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the easier jobs in the career field, with a Job Difficulty Index (JDI) of 5.9. A common job title indicated by these personnel was press operator and 47 percent of the group reported a previous 713X0 Printing-Binding AFSC.

Only 37 percent of this group found their job interesting, with 37 percent finding the job dull. Sixty-three percent felt their talents were utilized not at all to very little. However, 68 percent of the group felt fair or better utilization of training. As could be expected from the above job satisfaction indicators, reenlistment intentions were low for this group. Only 42 percent plan to reenlist, with 58 percent planning not to reenlist.

VI. Offset Duplicator (OD) Technician-Supervisor Personnel Cluster

Two job types were identified in this cluster. They were the OD and Bindery Technician-Supervisors, and the OD Technician-Supervisors. The bindery functions performed by the former group distinguished these two groups. Tables B2, B4, B6, B7, and B8 provide more information about these groups. Tables B17 and B18 respectively provide representative tasks for these job types.

VIA. OD AND BINDERY TECHNICIAN-SUPERVISORS (GRP108). The 50 members of this group perform a combination supervisory and technical job mainly in the areas of OD and Bindery functions. Fifty-four percent of these incumbents indicated duplicating as their main functional area. This group had one of the broadest jobs in the career ladder with members performing an average of 150 tasks. These tasks include:

- determine work priorities
- review printing requests
- maintain logs of jobs processed
- operate collators
- direct equipment maintenance

Seventy-four percent of this group indicated a 7-skill level DAFSC. None of the members of this group reported being in their first enlistment. Eighty-four percent report that they supervise other personnel. With an average time in service (TAFMS) of 176 months, this group was one of the more senior groups in the career ladder. They also had one of the harder jobs in the career ladder, with a Job Difficulty Index (JDI) of 19.3. Seventy-eight percent of these incumbents indicated rotation among the organizational functions. Typical job titles for these personnel include bindery worker, copier manager, duplicator operator, NCOIC duplicating center, reproduction manager, and supply manager. Ninety-four percent of these respondents reported the use of equipment in their present job. Forty-two percent of this group indicated assignments overseas, and 56 percent of these members were previously 713X2 Duplicating personnel.

Job satisfaction was high for this group with 80 percent finding their job interesting, and 86 percent feeling their talents were well utilized. Ninety percent felt their training was well utilized. Only 58 percent indicated reenlistment intentions; however, another 28 percent reported intentions to retire.

Vlb. OFFSET DUPLICATOR TECHNICIAN-SUPERVISORS (GRP123). This job type, containing only 5 members, deals mainly with supervisory and OD functions. Sixty percent of these incumbents report duplicating as the major functional area of their job. As the representative task list (Table B18) reveals, these individuals operate and maintain offset duplicators as a major part of their job; they also supervise others and do much of the first-line managerial work. An average of 78 tasks was reported performed by this group. Common tasks were:

- load OD feeder systems
- mix OD fountain solutions
- moisten duplicating dampening rollers
- replenish OD ink fountains
- set OD counters

Eighty percent of this group reported assignments overseas. Eighty percent were also 7-skill level personnel. All members reported supervising other incumbents, and all members were male. Eighty percent indicated rotation among organizational functions. Eighty percent of this group also indicated a previous 713X0 Printing-Binding AFSC.

Sixty percent of this group found their job interesting. Eighty percent felt their talents and training were well utilized and plan to reenlist. The one member who does not plan to reenlist is retiring.

IX. Printing Press (PP) Personnel Cluster

Two job types were identified in this cluster. They were the PP and Bindery Workers, and the PP Workers. The bindery functions of the former distinguish these two groups. Tables B2, B4, B6, B7, and B8 provide further information on these job types. Tables B19 and B20 give representative tasks for these groups respectively.

IXa. PRINTING PRESS AND BINDERY WORKERS (GRP068). The six members forming this job type concentrate on printing press and bindery functions. Sixty-seven percent of these individuals report printing as their main functional area. They perform an average of 52 tasks. Some common tasks include:

- operate collators
- operate cutters
- clean PP exteriors
- adjust PP vacuum or air flow
- staple paper

Thirty-three percent of the members of this group report rotation among organizational functions. Thirty-three percent of these respondents were also female. One-half of the group reported TAC as their major command and 67 percent were 5-skill level personnel. Some job titles indicated by these personnel are bindery worker, camera operator, platemaker, and press operator.

Eighty-three percent of this group found their job interesting and their talents and training utilized well; however, only 17 percent of this group indicated reenlistment intentions, with 33 percent planning not to reenlist, and 50 percent planning to retire.

IXb. PRINTING PRESS WORKERS (GRP086). The seven individuals comprising this group spend 73 percent of their time performing printing press functions. An additional 13 percent of their time was spent operating and maintaining offset duplicators. All of these workers reported printing as the main functional area of their work. This group performed an average of 80 tasks. Some typical tasks are:

- load PP feeder systems
- print and examine PP proofsheets
- engage PP feed controls
- clean PP exteriors
- adjust PP water rollers

All members of this group were DAFSC 70350 specialists. Fifty-seven percent of these members reported rotating among the various organizational functions. The job title most commonly indicated by these specialists was that of press operator.

Seventy-one percent of this group felt their talents were well utilized. Fifty-seven percent found their job interesting, their training well utilized, and planned not to reenlist, with no personnel indicating retirement intentions.

X. Bindery Personnel Cluster

This cluster contained two job types: the Bindery Workers, and the Bindery Technician-Supervisors. The supervisory functions performed by the latter job type distinguished the two groups. Tables B2, B4, B6, B7, and B8 provide further information on these groups. Tables B21 and B22 list the representative tasks for these jobs respectively.

Xa. BINDERY WORKERS (GRP037). Consisting of 13 members, this group concentrates in the technical area of performing bindery functions (absorbing 87 percent of their job time). Seventy-seven percent of the group reported binding as their main functional area. Bindery workers perform an average of only 20 tasks. They are a very heterogeneous group with a core of only 12 tasks performed by over half of the group. Some common tasks include:

- operate collators
- operate drills
- operate cutters
- collate paper by hand
- staple paper

Thirty-nine percent of this group indicated assignment at an overseas location. No members of this group reported supervising other personnel, with 23 percent of the group members completing the Reprographics course at Ft. Belvoir. Sixty-nine percent of this group rotated among the organizational functions. With a Job Difficulty Index (JDI) of 5.2, this was one of the easiest jobs in the career ladder. Bindery worker was the most common job title indicated by these respondents.

As could be expected by the limited and narrow nature of their job, job satisfaction indicators were low for this group. Only 39 percent of group members found their job interesting and intend to reenlist. Forty-six percent found the job dull, and plan not to reenlist. Perceived utilization of training was higher, with 77 percent feeling their training was well utilized.

Xb. BINDERY TECHNICIAN-SUPERVISORS (GRP04I). Comprised of 9 members, this group does a highly technical bindery job with supervisory functions being an additional large part of their work. Fifty-seven percent of the job time of these incumbents is directed toward bindery functions. Seventy-eight percent of the group members depict binding as their main functional area. These respondents report the performance of an average of 45 tasks. These tasks include:

- operate cutters
- operate stitchers
- inspect sequencing of pages
- operate drills
- adjust drills

No members of this group were in their first enlistment, with an average time in service (TAFMS) for the group of 45 months. All members of this group were male and all members were 5- and 7-skill level personnel. Sixty-seven percent reported that they supervise others, and 56 percent report rotating among the various organizational functions. Bindery Worker was the most common job title reported by these incumbents.

Eighty-nine percent of this group found their job interesting. Perceived utilization of talents and training were both fairly high. Reenlistment intentions were high also, with 78 percent indicating intentions to reenlist.

TABLE B1
RELATIVE PERCENT TIME SPENT ON DUTIES BY JOB TYPES

	SUPERVISORS CLUSTER (N=50)	LINER AND HALFTONE, AND LAYOUT AND STRIPPING PERSONNEL CLUSTER (N=12)	LINE AND HALFTONE, BINDERY, OD, AND LAYOUT AND STRIPPING WORKERS (N=12)	LINE AND HALFTONE, LAYOUT AND STRIPPING AND LAYOUT AND STRIPPING WORKERS (N=14)	OD, PP, AND BLINDFOLY WORKERS (N=34)	OD AND PP AND BLINDFOLY WORKERS (N=34)	OD WORKERS (N=6)	OFFSET DUPLICATOR (OD) AND PRINTING PRESS (PP) PERSONNEL CLUSTER (N=75)	OFFSET DUPLICATOR (OD) AND PRINTING PRESS (PP) PERSONNEL CLUSTER (N=19)
A ORGANIZING AND PLANNING	20	16	2	1	1	2	1	2	2
B DIRECTING AND IMPLEMENTING	26	20	2	2	1	1	1	1	1
C EVALUATING AND INSPECTING	20	12	2	3	1	*	*	1	*
D TRAINING	8	5	1	1	*	*	*	*	*
E PERFORMING ADMINISTRATIVE AND SUPPLY FUNCTIONS	11	14	1	1	2	2	2	2	2
F PERFORMING COPY MANAGEMENT FUNCTIONS	7	30	1	1	1	1	1	1	1
G PERFORMING ELECTROSTATIC MASTER FUNCTIONS	2	3	6	3	10	4	14	2	2
H OPERATING AND MAINTAINING OFFSET DUPLICATORS	1	1	14	*	35	46	62	84	84
I PERFORMING BINDERY FUNCTIONS	2	1	18	*	15	6	18	5	5
J PERFORMING PRINTING PRESS FUNCTIONS	1	*	5	*	31	41	*	*	*
K PREPARING LINE OR HALFTONE NEGATIVES AND POSITIVES	*	1	24	51	2	*	*	1	1
L PERFORMING LAYOUT AND STRIPPING FUNCTIONS	*	*	*	13	27	*	*	*	*
M PERFORMING PLATEROOM FUNCTIONS	*	*	6	9	*	*	*	*	*
N PERFORMING MICROGRAPHIC FUNCTIONS	2	*	5	*	*	*	*	*	*

* DENOTES LESS THAN ONE PERCENT

TABLE B2
RELATIVE PERCENT TIME SPENT ON DUTIES BY JOB TYPES

	OFFSET DUPLICATOR (OD) TECHNICIAN-SUPERVISOR PERSONNEL CLUSTER (N=50)	OD AND BINDERY TECHNICIAN-SUPERVISORS (N=5)	OD TECHNICIAN-SUPERVISORS (N=5)	PP AND BINDERY WORKERS (N=6)	PP WORKERS (N=7)	BINDERY WORKERS (N=13)	BINDERY PERSONNEL CLUSTER (N=9)
A ORGANIZING AND PLANNING	12	14	2	2	2	2	10
B DIRECTING AND IMPLEMENTING	15	21	1	3	3	2	15
C EVALUATING AND INSPECTING	12	14	*	1	1	*	8
D TRAINING	4	1	*	1	1	*	3
E PERFORMING ADMINISTRATIVE AND SUPPLY FUNCTIONS	9	9	4	1	3	3	3
F PERFORMING COPY MANAGEMENT FUNCTIONS	7	1	*	*	*	*	*
G PERFORMING ELECTROSTATIC MASTER FUNCTIONS	10	9	7	3	2	*	*
H OPERATING AND MAINTAINING OFFSET DUPLICATORS	27	24	9	13	8	8	*
I PERFORMING BINDERY FUNCTIONS	13	7	31	3	87	57	3
J PERFORMING PRINTING PRESS FUNCTIONS	1	*	46	73	*	*	
K PREPARING LINE OR HALFTONE NEGATIVES AND POSITIVES	1	*	*	*	*	*	1
L PERFORMING LAYOUT AND STRIPPING FUNCTIONS	*	*	*	*	*	*	*
M PERFORMING PLATEROOM FUNCTIONS	*	*	*	*	*	*	*
N PERFORMING MICROGRAPHIC FUNCTIONS	*	*	*	*	*	*	*

* DENOTES LESS THAN ONE PERCENT

TABLE B3
BACKGROUND INFORMATION FOR JOB TYPES

	SUPERVISORS CLUSTER	LINE AND HALFTONE, AND LAYOUT AND STRIPPING PERSONNEL CLUSTER	LINE AND HALFTONE, BINDER, OD, AND LAYOUT AND STRIPPING WORKERS (GRP058)	OD, PP, AND BINDER WORKERS (GRP129)	OD AND PP WORKERS (GRP142)	OD WORKERS (GRP158)	OD WORKERS (GRP173)	OFFSET DUPLICATOR AND PRINTING PRESSES (PP) PERSONNEL CLUSTER	OFFSET DUPLICATOR PERSONNEL CLUSTER
NUMBER IN GROUP	50	18	12	14	6	75	19		
PERCENT LOCATED OVERSEAS	10%	4%	2%	3%	1%	15%	4%		
PERCENT OF SAMPLE	24%	28%	8%	0%	0%	25%	1%		
DAFSC DISTRIBUTION									
70330	0%	0%	17%	14%	35%	67%	20%		
70350	16%	28%	56%	43%	59%	33%	76%		
70370	70%	67%	17%	43%	6%	0%	4%		
70390	14%	5%	8%	0%	0%	0%	0%		
AVERAGE GRADE	6.4	5.8	5.5	4.6	3.9	3.0	3.9		
AVERAGE TIME IN CAREER FIELD (MONTHS TICF)	182	137	51	104	52	31	41		
AVERAGE TIME IN SERVICE (MONTHS TAFMS)	209	159	86	112	69	33	59		
PERCENT IN FIRST ENLISTMENT	0%	6%	41%	36%	47%	83%	63%		
PERCENT SUPERVISING	86%	50%	33%	14%	6%	0%	4%		
AVERAGE NUMBER OF TASKS PERFORMED	94	46	42	67	87	52	55		
AVERAGE TASK DIFFICULTY PER UNIT	5.5	5.5	4.6	4.9	4.2	4.1	4.2		
TIME SPENT (AVERAGE)	17.4	13.2	17.0	12.7	12.2	8.5	9.0		
JOB DIFFICULTY INDEX (JDI)									
PERCENT COMPLETING REPROGRAPHICS									
COURSE AT FT BELVOIR	4%	0%	0%	14%	12%	67%	11%		
PERCENT OF FEMALE MEMBERS	2%	6%	25%	21%	21%	33%	28%		
PERCENT ROTATING AMONG ORGANIZATIONAL FUNCTIONS	68%	72%	75%	71%	62%	31%	61%		

TABLE B4

BACKGROUND INFORMATION FOR JOB TYPES

NUMBER IN GROUP	PERCENT OF SAMPLE	PERCENT LOCATED OVERSEAS	PRINTING PRESS (PP)			BINDERY PERSONNEL		
			PERSONNEL CLUSTER	PP AND BINDERY WORKERS (GRP068)	PP WORKERS (GRP086)	PERSONNEL CLUSTER	PP WORKERS (GRP037)	BINDERY TECHNICIAN-SUPERVISORS (GRP041)
50	5%	5%	6	1%	1%	7	13	9
10%	1%	1%	6	1%	1%	7	3%	2%
42%	80%	80%	17%	17%	14%	39%	39%	11%
DAFSC DISTRIBUTION								
70330	0%	0%	0%	0%	0%	23%	0%	0%
70350	26%	20%	67%	100%	0%	69%	44%	44%
70370	74%	80%	16%	0%	0%	8%	56%	56%
70390	0%	0%	0%	0%	0%	0%	0%	0%
AVERAGE GRADE								
5.9	5.8	4.0	3.9	3.9	3.9	3.9	3.9	5.6
147	149	37	52	52	52	49	49	128
176	161	86	62	62	62	66	66	165
AVERAGE TIME IN CAREER FIELD (MONTHS TICF)								
0%	20%	67%	57%	57%	57%	69%	69%	67%
84%	100%	17%	29%	29%	29%	0%	0%	67%
AVERAGE TIME IN SERVICE (MONTHS TAIS)								
PERCENT IN FIRST ENLISTMENT								
PERCENT SUPERVISING								
AVERAGE NUMBER OF TASKS PERFORMED								
150	78	52	80	80	80	20	20	45
AVERAGE TASK DIFFICULTY PER UNIT TIME SPENT (ADPUTS)								
4.9	4.9	4.3	4.7	4.7	4.7	4.1	4.1	4.8
19.3	14.1	9.3	13.5	13.5	13.5	5.2	5.2	10.3
JOB DIFFICULTY INDEX (JDI)								
PERCENT COMPLETING REPROGRAPHICS COURSE								
AT FT BELVOIR								
2%	20%	17%	14%	14%	14%	23%	23%	0%
4%	0%	33%	33%	33%	33%	39%	39%	0%
PERCENT OF FEMALE MEMBERS								
PERCENT ROTATING AMONG ORGANIZATIONAL FUNCTIONS								
78%	80%	33%	57%	57%	57%	69%	69%	56%

TABLE B5
JOB SATISFACTION AND RELATED DATA FOR JOB TYPES

SUPERVISORS CLUSTER	LINE AND HALFTONE, AND LAYOUT AND STRIPPING PERSONNEL CLUSTER		OFFSET DUPLICATOR (OD) AND PRINTING PRESS (PP) PERSONNEL CLUSTER		OFFSET DUPLICATOR (OD) PERSONNEL CLUSTER		
	HIGHER MANAGERS (N=20)	COPY MANAGERS (N=18)	OD, LAYOUT AND STRIPPING WORKERS (N=12)	OD, PP, AND BINDER WORKERS (N=14)	OD AND PP WORKERS (N=34)	OD WORKERS (N=6)	LIMITED JOB OD WORKERS (N=19)
<u>I FIND MY JOB:</u>							
DULL	4%	0%	17%	0%	18%	17%	37%
SO-SO	6%	11%	33%	21%	50%	21%	26%
INTERESTING	90%	89%	50%	79%	73%	33%	37%
<u>MY JOB UTILIZES MY TALENTS:</u>							
NOT AT ALL TO VERY LITTLE FAIRLY WELL OR BETTER	6%	6%	25%	14%	18%	50%	24%
	94%	94%	75%	86%	82%	50%	73%
<u>MY JOB UTILIZES MY TRAINING:</u>							
NOT AT ALL TO VERY LITTLE FAIRLY WELL OR BETTER	8%	6%	25%	7%	9%	17%	63%
	92%	94%	75%	93%	88%	83%	37%
<u>REENLISTMENT INTENTIONS:</u>							
WILL RETIRE	24%	17%	0%	7%	3%	0%	0%
PLAN NOT TO REENLIST	10%	17%	50%	29%	38%	50%	58%
PLAN TO REENLIST	66%	66%	50%	64%	59%	50%	42%

NOTE: COLUMNS MAY NOT ADD UP TO 100% DUE TO "NO RESPONSE"

TABLE B6
JOB SATISFACTION AND RELATED DATA FOR JOB TYPES

	OFFSET DUPLICATOR (OD) TECHNICIAN-SUPERVISOR PERSONNEL CLUSTER			PRINTING PRESS (PP) PERSONNEL CLUSTER			BINDERY PERSONNEL CLUSTER		
	OD AND BINDERY TECHNICIAN-SUPERVISORS (N=5)			PP AND BINDERY WORKERS (N=6)			BINDERY WORKERS (N=13)		
	DULL	2%	0%	17%	14%	46%	11%	0%	11%
<u>I FIND MY JOB:</u>	SO-SO	16%	20%	0%	29%	15%	39%	39%	89%
	INTERESTING	80%	60%	83%	57%	39%			
<u>MY JOB UTILIZES MY TALENTS:</u>									
	NOT AT ALL TO VERY LITTLE	14%	20%	17%	14%	35%	11%	11%	89%
	FAIRLY WELL OR BETTER	86%	80%	83%	71%	54%			
<u>MY JOB UTILIZES MY TRAINING:</u>									
	NOT AT ALL TO VERY LITTLE	10%	20%	17%	43%	23%	22%	22%	78%
	FAIRLY WELL OR BETTER	90%	80%	83%	57%	77%			
<u>REENLISTMENT INTENTIONS:</u>									
	WILL RETIRE	28%	20%	50%	0%	15%	11%	11%	11%
	PLAN NOT TO REENLIST	24%	0%	33%	43%	46%			
	PLAN TO REENLIST	38%	80%	17%	57%	39%	78%	78%	

NOTE: COLUMNS MAY NOT ADD UP TO 100% DUE TO "NO RESPONSE"

TABLE B7
PREVIOUS AFSCs HELD PRIOR TO AFSC 703X0 ACCORDING TO JOB TYPES

JOB TYPES	PREVIOUS AFSCs HELD			
	713X0	713X1	713X2	OTHER OR NONE
HIGHER MANAGERS	36%	18%	28%	18%
COPY MANAGERS	50%	6%	33%	11%
LINE AND HALFTONE, BINDERY, OD, AND LAYOUT AND STRIPPING WORKERS	25%	42%	25%	0%
LINE AND HALFTONE, AND LAYOUT AND STRIPPING WORKERS	43%	21%	7%	21%
OFFSET DUPLICATOR (OD), PRINTING PRESS (PP) AND BINDERY WORKERS	27%	9%	23%	41%
OD AND PP WORKERS	17%	0%	17%	66%
OD WORKERS	29%	3%	27%	36%
LIMITED JOB OD WORKERS	47%	0%	11%	42%
OD AND BINDERY TECHNICIAN-SUPERVISORS	30%	2%	56%	10%
OD TECHNICIAN-SUPERVISORS	80%	20%	0%	0%
PP AND BINDERY WORKERS	33%	0%	0%	67%
PP WORKERS	29%	0%	14%	57%
BINDERY WORKERS	31%	8%	23%	38%
BINDERY TECHNICIAN-SUPERVISORS	44%	22%	22%	11%

NOTE: LINES MAY NOT ADD UP TO 100% DUE TO "NO RESPONSE"

TABLE B8

FUNCTIONAL AREA MAJORITY OF TIME SPENT ACCORDING TO JOB TYPES

JOB TYPES	FUNCTIONAL AREA						TOTAL
	PRINTING	DUPPLICATION	LITHOGRAPHY	BINDING	MICROGRAPHICS	OTHER	
HIGHER MANAGERS	6%	30% 22%	25	2% 6%	6%	46%	92%
COPY MANAGERS	11%		0%		6%	55%	100%
LINE AND HALFTONE, BINDERY, OD, AND LAYOUT AND STRIPPING WORKERS	8%	17%	50%	17%	8%	0%	100%
LINE AND HALFTONE, AND LAYOUT AND STRIPPING WORKERS	0%	0%	93%	0%	0%	7%	100%
OFFSET DUPLICATOR (OD), PRINTING PRESS (PP), AND BINDERY WORKERS	59%	38%	0%	3%	0%	0%	100%
OD AND PP WORKERS	67%	33%	0%	0%	1%	0%	100%
OD WORKERS	35%	60%	0%	0%	0%	3%	99%
LIMITED JOB OD WORKERS	37%	58%	0%	0%	0%	0%	95%
OD AND BINDERY TECHNICIAN-SUPERVISORS	8%	54%	0%	6%	0%	30%	98%
OD TECHNICIAN-SUPERVISORS	20%	60%	0%	0%	0%	20%	100%
PP AND BINDERY WORKERS	67%	0%	0%	17%	0%	16%	100%
PP WORKERS	100%	0%	0%	0%	0%	0%	100%
BINDERY WORKERS	23%	0%	0%	77%	0%	0%	100%
BINDERY TECHNICIAN-SUPERVISORS	11%	11%	0%	78%	0%	0%	100%

NOTE: LINES MAY NOT ADD UP TO 100% DUE TO "NO RESPONSE"

TABLE B9
TASKS PERFORMED BY HIGHER MANAGERS (GRP058)

TASKS	PERCENT MEMBERS PERFORMING
B32 COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED PROBLEMS	96
A27 SCHEDULE LEAVES OR PASSES	96
C90 PREPARE APRs	92
A4 DETERMINE REQUIREMENTS FOR SPACE, EQUIPMENT, PERSONNEL, OR SUPPLIES	92
B33 DETERMINE MOST ECONOMICAL METHODS OF REPRODUCTION	90
B44 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	90
A5 DETERMINE WORK PRIORITIES	90
B60 WRITE CORRESPONDENCE	88
B50 REVIEW PRINTING REQUESTS	88
C62 ANALYZE WORKLOAD REQUIREMENTS	86
C75 EVALUATE EQUIPMENT BEFORE PURCHASE OR RENTAL	86
A3 CALCULATE VALUE OF EQUIPMENT	86
A1 ASSIGN PERSONNEL TO DUTY POSITIONS	86
A22 PLAN WORK ASSIGNMENTS	82
A8 DEVELOP WORK METHODS OR PROCEDURES	82
C61 ACCOUNT FOR MATERIALS EXPENDED	78
B37 DIRECT QUALITY CONTROL PROGRAMS	78
A14 ESTABLISH PRODUCTION CONTROLS	78
A2 ASSIGN SPONSORS FOR NEWLY ASSIGNED PERSONNEL	78
A7 DEVELOP STANDARDS FOR PRINTED MATERIALS	76
C71 ENDORSE AIRMAN PERFORMANCE REPORTS (APR)	76
B35 DIRECT EQUIPMENT MAINTENANCE	74
B38 DIRECT UTILIZATION OF EQUIPMENT	74
E132 MAINTAIN LIST OF EQUIPMENT	74
B39 IMPLEMENT COST REDUCTION PROGRAMS	74

TABLE B10
TASKS PERFORMED BY COPY MANAGERS (GRP050)

<u>TASKS</u>	<u>PERCENT MEMBERS PERFORMING</u>
F151 ADVISE USERS ON COPYING PROCEDURES	100
G157 ESTABLISH CONTROLS FOR USE OF COPIERS	94
F159 EVALUATE NEED FOR COPIERS OR TYPES OF COPIERS REQUESTED BY USERS	94
F161 MAINTAIN RECORDS OF COPIER MONITORS	94
F163 MAKE ENTRIES ON COPIER COST AND PRODUCTION REPORT FORMS (AF FORM 936)	94
F162 MAKE ENTRIES ON CONSOLIDATED COPYING INVENTORY COST AND PRODUCTION REPORTS FORMS (AF FORM 893)	94
F152 CONDUCT ORIENTATION CLASSES FOR COPIER MONITORS	83
B48 MAINTAIN STATUS BOARDS, GRAPHS, OR CHARTS	83
B60 WRITE CORRESPONDENCE	78
F160 INVESTIGATE USAGE OF COPIERS ASSIGNED TO OTHER UNITS	78
C75 EVALUATE EQUIPMENT BEFORE PURCHASE OR RENTAL	78
F167 REVIEW COPIER LOGS	72
E148 MAKE ENTRIES ON REQUEST FOR PURCHASE FORMS (AF FORM 9)	72
A3 CALCULATE VALUE OF EQUIPMENT	72
B50 REVIEW PRINTING REQUESTS	67
A11 ESTABLISH ORGANIZATIONAL POLICIES, OFFICE INSTRUCTIONS, OR STANDARD OPERATING PROCEDURES	67
A5 DETERMINE WORK PRIORITIES	67
B49 PREPARE REQUISITIONS FOR SUPPLIES OR EQUIPMENT	61
E133 MAINTAIN LOGS OF JOBS PROCESSED	56
B39 IMPLEMENT COST REDUCTION PROGRAMS	56
B33 DETERMINE MOST ECONOMICAL METHODS OF REPRODUCTION	56
E143 MAKE ENTRIES ON CUSTODIAN REQUEST/RECEIPT FORMS (AF FORM 601B)	56
A7 DEVELOP STANDARDS FOR PRINTED MATERIALS	56
A9 DRAFT BUDGET OR FINANCIAL REQUIREMENTS	56
C90 PREPARE APRs	56

TABLE B11

TASKS PERFORMED BY LINE AND HALFTONE, BINDERY, OFFSET DUPLICATOR (OD), AND
LAYOUT AND STRIPPING WORKERS (GRP075)

<u>TASKS</u>	<u>PERCENT MEMBERS PERFORMING</u>
I261 OPERATE COLLATORS	100
I248 HAND MARRY SETS	100
L411 INSPECT NEGATIVES	100
K401 SET CAMERA EXPOSURE TIMES	100
K372 DETERMINE JOB SPECIFICATIONS FOR PREPARING NEGATIVES OR POSITIVES	100
M428 CLEAN GLASS ON PLATEMAKERS	100
M429 COMPUTE PLATEMAKER EXPOSURE TIMES	100
I244 CLEAN BINDERY EQUIPMENT	100
K353 ADJUST CAMERA LIGHTS	100
I284 STAPLE PAPER	92
I245 COLLATE PAPER BY HAND	92
K359 CENTER IMAGES ON GROUND GLASS	92
K384 PREPARE DEVELOPERS OR FIXERS	92
L426 TRIM NEGATIVES	92
K371 CUT FILM TO SIZE	92
K354 ADJUST COPYBOARDS	92
K355 ADJUST LENSBOARD	92
K400 SET CAMERA APERTURES	92
L406 CLEAN GLASS ON LIGHT TABLES	92
I242 ADJUST STITCHERS	92
I262 OPERATE CUTTERS	92
L413 OPAQUE OR MASK UNWANTED AREAS OF NEGATIVES OR POSITIVES	83
K369 COMPUTE COPYBOARD SETTINGS	83
K370 COMPUTE LENS SETTINGS	83
K364 CLEAN COPYBOARD GLASS	83
H229 SET OD COUNTERS	83
H206 MOISTEN DUPLICATING DAMPENING ROLLERS	83
H205 MIX OD FOUNTAIN SOLUTIONS	83

TABLE B12

TASKS PERFORMED BY LINE AND HALFTONE, AND LAYOUT AND STRIPPING WORKERS (GRP085)

TASKS	PERCENT MEMBERS PERFORMING
K376 FLASH FILM FOR SHADOW DOTS	100
K354 ADJUST COPYBOARDS	93
K355 ADJUST LENSBOARD	93
K401 SET CAMERA EXPOSURE TIMES	93
K391 REMOVE OR REPLACE CAMERA LENS CAPS	93
K364 CLEAN COPYBOARD GLASS	93
K353 ADJUST CAMERA LIGHTS	93
L404 ASSEMBLE FLATS	86
L414 POSITION AND TAPE NEGATIVES ON LAYOUT SHEETS	86
L413 OPAQUE OR MASK UNWANTED AREAS OF NEGATIVES OR POSITIVES	86
K400 SET CAMERA APERTURES	86
K369 COMPUTE COPYBOARD SETTINGS	86
K370 COMPUTE LENS SETTINGS	86
K357 ADJUST VACUUM ON CAMERA BACKS	86
L406 CLEAN GLASS ON LIGHT TABLES	86
K384 PREPARE DEVELOPERS OR FIXERS	86
K371 CUT FILM TO SIZE	86
K358 ATTACH SCREENS TO FILM VACUUM BACKS	86
K397 SELECT AND ATTACH LENS FILTERS	86
L409 CORRECT IMPERFECTIONS IN NEGATIVES	86
K362 CLEAN CAMERA EXTERIORS	86
L411 INSPECT NEGATIVES	79
L407 CLEAN OPAQUE BRUSHES	79
K372 DETERMINE JOB SPECIFICATIONS FOR PREPARING NEGATIVES OR POSITIVES	79
L415 POSITION TIC AND TRIM MARKS	79

TABLE B13
TASKS PERFORMED BY OFFSET DUPLICATOR (OD), PRINTING PRESS (PP),
AND BINDERY WORKERS (GRP129)

TASKS	PERCENT MEMBERS PERFORMING
H205 MIX OD FOUNTAIN SOLUTIONS	100
H226 REPLENISH OD INK FOUNTAINS	100
H208 MOUNT OD MASTERS ON MASTER CYLINDERS	100
H195 ADJUST OD INK FLOW	100
H206 MOISTEN DUPLICATING DAMPENING ROLLERS	97
H212 REMOVE OD MASTERS AND CLEAN BLANKETS	97
H228 RUN MASTERS THROUGH MASTER CONVERTERS	94
H189 ADJUST IMAGE ON OFFSET DUPLICATORS (OD)	94
H197 ADJUST OD PILE HEIGHT CONTROLS	94
H207 MOUNT OD BLANKETS ON BLANKET CYLINDERS	94
H229 SET OD COUNTERS	91
J311 CLEAN PP IMPRESSION CYLINDERS	91
J310 CLEAN PP EXTERIORS	91
J305 ADJUST PP VACUUM OR AIR FLOW	91
H201 CLEAN OD FEEDER ROLLERS	91
J340 REPLENISH PP INK FOUNTAINS	88
H190 ADJUST OD FEEDING UNIT BLOWERS	88
H191 ADJUST OD GUIDES OR CYLINDERS	85
H203 LOAD OD FEEDER SYSTEMS	82
H227 REPLENISH ODs WITH FOUNTAIN SOLUTIONS OTHER THAN INK	82
J342 REPLENISH PP WATER FOUNTAINS	82
J309 ATTACH PP PLATES TO PLATE CYLINDERS	82
H204 LUBRICATE ODs	82
I261 OPERATE COLLATORS	79
I284 STAPLE PAPERS	76
I262 OPERATE CUTTERS	76
I263 OPERATE DRILLS	76

TABLE B14
TASKS PERFORMED BY OFFSET DUPLICATOR AND PRINTING
PRESS WORKERS (GRP142)

TASKS	PERCENT MEMBERS PERFORMING
H208 MOUNT OD MASTERS ON MASTER CYLINDERS	100
H226 REPLENISH OD INK FOUNTAINS	100
H229 SET OD COUNTERS	100
H189 ADJUST IMAGE ON OFFSET DUPLICATORS (OD)	100
J329 PREPARE PP PLATES FOR MOUNTING	100
H195 ADJUST OD INK FLOW	100
H197 ADJUST OD PILE HEIGHT CONTROLS	100
H230 SET OD MULTISHEET DETECTORS	100
H231 SET OD RECEIVING TRAY JOGTERS	100
H190 ADJUST OD FEEDING UNIT BLOWERS	100
H203 LOAD OD FEEDER SYSTEMS	83
H205 MIX OD FOUNTAIN SOLUTIONS	83
H206 MOISTEN DUPLICATING DAMPENING ROLLERS	83
J348 SET PP COUNTERS	83
H212 REMOVE OD MASTERS AND CLEAN BLANKETS	83
J301 ADJUST PP PILE HEIGHT INDICATORS	83
J349 SET PP INK OR WATER CONTROLS	83
H196 ADJUST OD PAPER BUCKLES	83
H207 MOUNT OD BLANKETS ON BLANKET CYLINDERS	83
J346 SET KEYS ON INK FOUNTAIN BLADES	83
H228 RUN MASTERS THROUGH MASTER CONVERTERS	67
H227 REPLENISH ODs WITH FOUNTAIN SOLUTIONS OTHER THAN INK	67
J311 CLEAN PP IMPRESSION CYLINDERS	67
J323 MIX PP FOUNTAIN OR DAMPENING SOLUTIONS OTHER THAN INKS	67
J340 REPLENISH PP INK FOUNTAINS	67

TABLE B15
TASKS PERFORMED BY OFFSET DUPLICATOR WORKERS (GRP158)

<u>TASKS</u>	<u>PERCENT MEMBERS PERFORMING</u>
H195 ADJUST OD INK FLOW	100
H208 MOUNT OD MASTERS ON MASTER CYLINDERS	99
H229 SET OD COUNTERS	97
H228 RUN MASTERS THROUGH MASTER CONVERTERS	97
H205 MIX OD FOUNTAIN SOLUTIONS	97
H226 REPLENISH OD INK FOUNTAINS	97
H189 ADJUST IMAGE ON OFFSET DUPLICATORS (OD)	97
H212 REMOVE OD MASTERS AND CLEAN BLANKETS	96
H197 ADJUST OD PILE HEIGHT CONTROLS	95
H207 MOUNT OD BLANKETS ON BLANKET CYLINDERS	95
H206 MOISTEN DUPLICATING DAMPENING ROLLERS	93
H190 ADJUST OD FEEDING UNIT BLOWERS	93
H203 LOAD OD FEEDER SYSTEMS	92
H191 ADJUST OD GUIDES OR CYLINDERS	92
H227 REPLENISH ODs WITH FOUNTAIN SOLUTIONS OTHER THAN INK	88
H201 CLEAN OD FEEDER ROLLERS	88
H230 SET OD MULTISHEET DETECTORS	87
H198 ADJUST OD ROLLERS	85
H204 LUBRICATE ODs	83
H199 ADJUST PRESSURE BETWEEN MASTER CYLINDERS AND BLANKET CYLINDERS	83
H202 CLEAN ODs OTHER THAN AIR FILTERS OR FEEDER ROLLERS	80
H219 REMOVE OR REPLACE OD MINOR HARDWARE, SUCH AS NUTS, BOLTS, OR SCREWS	77
H214 REMOVE OR REPLACE OD DAMPENER COVERS	77
H196 ADJUST OD PAPER BUCKLES	77
H200 CLEAN OD AIR FILTERS	76
H221 REMOVE OR REPLACE OD ROLLERS	75

TABLE B16
TASKS PERFORMED BY LIMITED JOB OFFSET DUPLICATOR WORKERS (GRP173)

TASKS	PERCENT MEMBERS PERFORMING
H189 ADJUST IMAGE ON OFFSET DUPLICATORS (OD)	100
H195 ADJUST OD INK FLOW	100
H207 MOUNT OD BLANKETS ON BLANKET CYLINDERS	100
H229 SET OD COUNTERS	95
H226 REPLENISH OD INK FOUNTAINS	95
H228 RUN MASTERS THROUGH MASTER CONVERTERS	95
H197 ADJUST OD PILE HEIGHT CONTROLS	95
H208 MOUNT OD MASTERS ON MASTER CYLINDERS	89
H206 MOISTEN DUPLICATING DAMPENING ROLLERS	89
H205 MIX OD FOUNTAIN SOLUTIONS	89
H214 REMOVE OR REPLACE OD DAMPENER COVERS	89
H190 ADJUST OD FEEDING UNIT BLOWERS	89
H203 LOAD OD FEEDER SYSTEMS	84
H227 REPLENISH ODs WITH FOUNTAIN SOLUTIONS OTHER THAN INK	84
H212 REMOVE OD MASTERS AND CLEAN BLANKETS	84
H191 ADJUST OD GUIDES OR CYLINDERS	84
H230 SET OD MULTISHEET DETECTORS	84
H201 CLEAN OD FEEDER ROLLERS	79
H202 CLEAN ODs OTHER THAN AIR FILTERS OR FEEDER ROLLERS	79
H231 SET OD RECEIVING TRAY JOGGERs	79
H196 ADJUST OD PAPER BUCKLES	74
H198 ADJUST OD ROLLERS	74
H204 LUBRICATE ODs	58
H219 REMOVE OR REPLACE OD MINOR HARDWARE, SUCH AS NUTS, BOLTS, OR SCREWS	58
G176 ADJUST POSITION OF IMAGES ON ELECTROSTATIC MASTERS	53

TABLE B17

TASKS PERFORMED BY OFFSET DUPLICATOR AND BINDERY TECHNICIAN-SUPERVISORS (GRP108)

TASKS	PERCENT MEMBERS PERFORMING
B33 DETERMINE MOST ECONOMICAL METHODS OF REPRODUCTION	98
A5 DETERMINE WORK PRIORITIES	96
B50 REVIEW PRINTING REQUESTS	94
E133 MAINTAIN LOGS OF JOBS PROCESSED	94
I261 OPERATE COLLATORS	92
B35 DIRECT EQUIPMENT MAINTENANCE	92
B51 SCHEDULE EQUIPMENT MAINTENANCE	92
I262 OPERATE CUTTERS	92
G180 COMPUTE AMOUNT OF ENLARGEMENT OR REDUCTION OF IMAGES	92
G170 ADJUST EMI EXPOSURE TIME	92
G176 ADJUST POSITION OF IMAGES ON ELECTROSTATIC MASTERS	92
A4 DETERMINE REQUIREMENTS FOR SPACE, EQUIPMENT, PERSONNEL, OR SUPPLIES	92
G179 CLEAN EMI GLASS, COPYBOARDS, MIRRORS, OR LENSES	92
A8 DEVELOP WORK METHODS OR PROCEDURES	90
A12 ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	90
G168 ADJUST ELECTROSTATIC MASTER IMAGER (EMI) APERTURES	90
I284 STAPLE PAPER	90
H195 ADJUST OD INK FLOW	90
I263 OPERATE DRILLS	90
G175 ADJUST EMI TONER FEED	90
B45 INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES	88
B52 SCHEDULE WORK ASSIGNMENTS	88
G183 PREPARE OFFSET PLATES USING EMIs	88
I248 HAND MARRY SETS	88
H189 ADJUST IMAGE ON OFFSET DUPLICATORS (OD)	88

TABLE B18
TASKS PERFORMED BY OFFSET DUPLICATOR TECHNICIAN-SUPERVISORS (GRP123)

<u>TASKS</u>	<u>PERCENT MEMBERS PERFORMING</u>
H203 LOAD OD FEEDER SYSTEMS	100
H205 MIX OD FOUNTAIN SOLUTIONS	100
H206 MOISTEN DUPLICATING DAMPENING ROLLERS	100
H226 REPLENISH OD INK FOUNTAINS	100
H228 RUN MASTERS THROUGH MASTER CONVERTERS	100
H229 SET OD COUNTERS	100
H190 ADJUST OD FEEDING UMT BLOWERS	100
H195 ADJUST OD INK FLOW	100
H197 ADJUST OD PILE HEIGHT CONTROLS	100
H201 CLEAN OD FEEDER ROLLERS	100
H207 MOUNT OD BLANKETS ON BLANKET CYLINDERS	100
G170 ADJUST EMI EXPOSURE TIME	100
H230 SET OD MULTISHEET DETECTORS	100
H189 ADJUST IMAGE ON OFFSET DUPLICATORS (OD)	100
H193 ADJUST OD IMPRESSION CYLINDERS	100
H198 ADJUST OD ROLLERS	100
H204 LUBRICATE ODs	100
H208 MOUNT OD MASTERS ON MASTER CYLINDERS	100
B50 REVIEW PRINTING REQUESTS	80
E133 MAINTAIN LOGS OF JOBS PROCESSED	80
A5 DETERMINE WORK PRIORITIES	80
B52 SCHEDULE WORK ASSIGNMENTS	80
B35 DIRECT EQUIPMENT MAINTENANCE	80
C63 CALCULATE RATES OF PRODUCTION	80
C90 PREPARE APRs	80

TABLE B19
TASKS PERFORMED BY PRINTING PRESS AND BINDERY WORKERS (GRP068)

<u>TASKS</u>	<u>PERCENT MEMBERS PERFORMING</u>
I261 OPERATE COLLATORS	100
I262 OPERATE CUTTERS	100
J310 CLEAN PP EXTERIORS	100
J305 ADJUST PP VACUUM OR AIR FLOW	100
I284 STAPLE PAPER	100
I263 OPERATE DRILLS	100
I250 INSPECT SEQUENCING OF PAGES	83
J311 CLEAN PP IMPRESSION CYLINDERS	83
I244 CLEAN BINDERY EQUIPMENT	83
J320 LOAD PP FEEDER SYSTEMS	83
J309 ATTACH PP PLATES TO PLATE CYLINDERS	83
J301 ADJUST PP PILE HEIGHT INDICATORS	83
I245 COLLATE PAPER BY HAND	83
J298 ADJUST PP IMPRESSION CYLINDER PRESSURE	83
J329 PREPARE PP PLATES FOR MOUNTING	83
J307 ADJUST PP WATER ROLLERS	83
J306 ADJUST PP WATER FOUNTAIN STOPS	83
I248 HAND MARRY SETS	67
J313 CLEAN PP PLATE CLAMPS	67
J348 SET PP COUNTERS	67
H189 ADJUST IMAGE ON OFFSET DUPLICATORS (OD)	67
J345 SELECT PP INK	67
J308 ATTACH PP BLANKETS TO BLANKET CYLINDERS	67
J296 ADJUST PP GRIPPER FINGERS	67
J299 ADJUST PP INK ROLLERS	67

TABLE B20
TASKS PERFORMED BY PRINTING PRESS WORKERS (GRP086)

TASKS	PERCENT MEMBERS PERFORMING
J320 LOAD PP FEEDER SYSTEMS	100
J330 PRINT AND EXAMINE PP PROOFSHEETS	100
J318 ENGAGE PP FEED CONTROLS	100
J310 CLEAN PP EXTERIORS	100
J307 ADJUST PP WATER ROLLERS	100
J316 COVER PP DAMPENING ROLLERS	100
J305 ADJUST PP VACUUM OR AIR FLOW	100
J306 ADJUST PP WATER FOUNTAIN STOPS	100
J337 REMOVE OR REPLACE PP WATER ROLLERS	100
J300 ADJUST PP PAPER CALIPERS	100
J301 ADJUST PP PILE HEIGHT INDICATORS	100
J346 SET KEYS ON INK FOUNTAIN BLADES	100
J298 ADJUST PP IMPRESSION CYLINDER PRESSURE	100
J299 ADJUST PP INK ROLLERS	100
J304 ADJUST PP SEPARATOR FINGERS	100
J334 REMOVE OR REPLACE PP INK OR WATER ROLLERS	100
J297 ADJUST PP HEAD STOPS	100
J338 REMOVE OR REPLACE SEPARATOR FINGERS	100
J332 REMOVE OR REPLACE PP AIR HOSES	100
J323 MIX PP FOUNTAIN OR DAMPENING SOLUTIONS OTHER THAN INKS	86
J340 REPLENISH PP INK FOUNTAINS	86
J324 PERFORM PP PREOPERATIONAL INSPECTIONS	86
J311 CLEAN PP IMPRESSION CYLINDERS	86
J321 LUBRICATE PRINTING PRESSES	86
J342 REPLENISH PP WATER FOUNTAINS	86

TABLE B21
TASKS PERFORMED BY BINDERY WORKERS (GRP037)

<u>TASKS</u>	<u>PERCENT MEMBERS PERFORMING</u>
I261 OPERATE COLLATORS	100
I263 OPERATE DRILLS	100
I262 OPERATE CUTTERS	92
I245 COLLATE PAPER BY HAND	92
I284 STAPLE PAPER	85
I250 INSPECT SEQUENCING OF PAGES	77
I271 OPERATE STITCHERS	77
I244 CLEAN BINDERY EQUIPMENT	69
I285 TRIM PAPER	69
I248 HAND MARRY SETS	62
I242 ADJUST STITCHERS	62
I255 LUBRICATE DRILLS	54
I253 LABEL, ADDRESS, OR MAIL MATERIALS	46
I251 INSTALL DRILL BITS OR SPINDLES	46
I274 PACK PRINTED MATERIALS MANUALLY	38
I276 POSITION STITCHER TABLES	38
I264 OPERATE FOLDERS	38
I254 LUBRICATE CUTTERS	38
I236 ADJUST DRILLS	38
I265 OPERATE GATHERERS	23
E133 MAINTAIN LOGS OF JOBS PROCESSED	23
I256 LUBRICATE FOLDERS	23
I241 ADJUST GAUGE OF FOLDER PLATES	23
I287 WRAP PRINTED MATERIALS MANUALLY	23
I275 PERFORM PADDING OPERATIONS	23

TABLE B22
TASKS PERFORMED BY BINDERY TECHNICIAN-SUPERVISORS (GRP041)

<u>TASKS</u>	<u>PERCENT MEMBERS PERFORMING</u>
I262 OPERATE CUTTERS	89
I271 OPERATE STITCHERS	89
I250 INSPECT SEQUENCING OF PAGES	89
I280 REMOVE OR REPLACE CUTTING STICKS	89
I251 INSTALL DRILL BITS OR SPINDLES	89
I263 OPERATE DRILLS	78
I236 ADJUST DRILLS	78
I234 ADJUST CUTTER CLAMP PRESSURE	78
B32 COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED PROBLEMS	78
I248 HAND MARRY SETS	67
I245 COLLATE PAPER BY HAND	67
A5 DETERMINE WORK PRIORITIES	67
I285 TRIM PAPER	67
B35 DIRECT EQUIPMENT MAINTENANCE	67
I244 CLEAN BINDERY EQUIPMENT	67
I242 ADJUST STITCHERS	67
I284 STAPLE PAPER	67
I282 SELECT WIRE AND LOAD SPOOLS	67
I249 INSPECT CUTTERS FOR ACCURACY	67
I281 REMOVE OR REPLACE STITCHER PARTS	67
I274 PACK PRINTED MATERIALS MANUALLY	56
A22 PLAN WORK ASSIGNMENTS	56
I261 OPERATE COLLATORS	56
C65 EDIT COMPLETED WORK FOR COMPLIANCE WITH WORK REQUESTS	56
I279 REMOVE OR REPLACE CUTTING BLADES	56
B50 REVIEW PRINTING REQUESTS	56
A8 DEVELOP WORK METHODS OR PROCEDURES	56

